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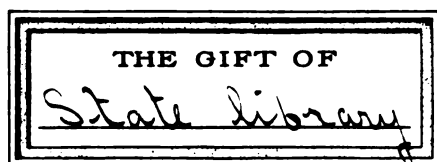
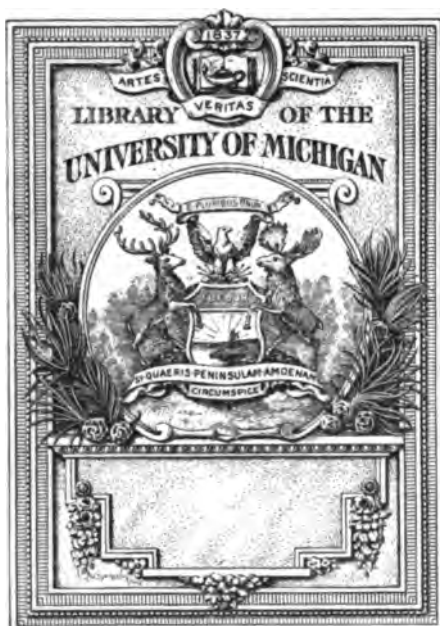
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TWENTY-SIXTH
ANNUAL REPORT

OF THE

State Board of Health
of Indiana

FOR THE

Fiscal Year Ending September 30, 1907.
Statistical Year Ending December 31, 1907.

TO THE GOVERNOR.

INDIANAPOLIS:
WM. B. BURFORD, CONTRACTOR FOR STATE PRINTING AND BINDING.
1907.

**STATE OF INDIANA,
EXECUTIVE DEPARTMENT,
INDIANAPOLIS, November 30, 1907. }**

Received by the Governor, examined and referred to the Auditor of State for verification of the financial statement.

**OFFICE OF AUDITOR OF STATE,
INDIANAPOLIS, December 28, 1907. }**

The within report, so far as the same relates to moneys drawn from the State Treasury, has been examined and found correct.

J. C. BILLHEIMER,
Auditor of State.

DECEMBER 28, 1907.

Returned by the Auditor of State, with above certificate, and transmitted to Secretary of State for publication, upon the order of the Board of Commissioners of Public Printing and Binding.

FRED L. GEMMER,
Secretary to the Governor.

Filed in the office of the Secretary of State of the State of Indiana, December 28, 1907.

FRED A. SIMS,
Secretary of State.

Received the within report and delivered to the printer this 28th day of December, 1907.

HARRY SLOUGH,
Clerk Printing Bureau.

"The care of the public health is the
first duty of the statesman."—*Gladstone*.

TWENTY-SIXTH ANNUAL REPORT

OF THE

INDIANA STATE BOARD OF HEALTH.

HON. J. FRANK HANLY, *Governor of Indiana*:

In accordance with the commands of the Health Law, the State Board of Health herewith presents to you its twenty-sixth annual report.

CONTENTS OF REPORT.

This report gives the "doings and investigations" of the Board for the year ending October 31, 1907; it contains the report of the State Laboratory of Hygiene, which is a department of the Board, the report of the department of Foods and Drugs, and also the vital statistics for the year.

"DOINGS AND INVESTIGATIONS."

Four regular and five special meetings were held during the year, and the minutes fully set forth what was done. The quarterly reports of the Secretary, presented at the regular quarterly meetings, give specific accounts of his office and field work.

VITAL STATISTICS.

The mortality statistics have been very accurate since 1900, owing to the penalty of the law passed that year being very severe and summary for failure to report and for interring the dead without permits. The birth and infectious disease statistics have been very imperfect, but the new law passed by the Sixty-fifth Assembly makes it possible to collect them more accurately, and for 1903 these statistics will be much better.

It is to be regretted that the legislature did not pass the Statistical Law as it was written, for then we could have promised that the birth and infectious disease records would be entirely correct.

The method adopted for presenting the death statistics is that known as "The International Classification System." This system is used by the United States Census Bureau and by all the registration states.

SANITARY WORK.

The State Board of Health has been active and made strong efforts to awaken interest in sanitary matters, and has tried hard to see to it that the health laws were enforced. As a result, there has been an increasing demand upon the Board for aid and information. Requests are almost daily received, asking that the Board pay visits and give advice in sanitary matters, or solve some sanitary problem which has arisen. As far as possible, the Secretary or some member of the Board has answered these calls in person. To answer all such calls in person would take all of the Secretary's time and also considerable time of each member of the Board. This is evident, when it is known there were 283 calls from the people in 1907 for personal visits. When it is impossible on account of distance and time involved, to meet these calls for personal visits, letters of explanation and advice are written. If the demands of the people for personal aid from the State Board of Health are to be met, the authority to employ and the means to support one or two deputy State health officers, must be given. Very few physicians have studied the branch of medicine known as hygiene, and therefore it very frequently happens that the appointed local health officers know nothing or very little of the work they are called to do, and find themselves at sea when a sanitary problem appears. There would be little or no demand for State Board advice if the law required that local health officers should be informed in hygiene, and if the tenure of office and pay were such as to attract competent men. We recommend this change in the law as being eminently practical and businesslike.

EPIDEMICS.

No widespread epidemics have occurred, but there were a number of local epidemics, all of which are duly told about in the body of the report. Smallpox, which is a declaration of ignorance and neglect, because the people generally will not practically apply the scientific prophylaxis, has existed more or less in every month of the year. Fortunately, the deaths have been few, but the loss and anxiety has been great.

There is a decrease in diphtheria deaths, with the exception of the

last year, to be recorded for the last seven years, as appears herewith. Diphtheria deaths, 1900, 746; 1901, 554; 1902, 424; 1903, 462; 1904, 314; 1905, 366; 1906, 402.

The free antitoxin law, passed by the Sixty-fifth Assembly, has been duly put in force by the State Board supplying blanks as detailed in the law, and giving general instructions about the matter. It is believed this law will be a force in saving life from diphtheria.

Scarlet fever prevailed to a considerable degree, upon the opening of the schools in September, but it was almost always in mild form. Deaths from this cause have not increased.

STATE LABORATORY OF HYGIENE.

The State Laboratory of Hygiene's report shows a large amount of good work done. The chemical division has carried out the pure Food and Drug Law, which was passed by the Sixty-fifth Assembly, and which went into immediate force on March 4th. It has also made many sanitary water and sewage analyses, and through the five inspectors authorized, many sanitary inspections with corrections of unsanitary conditions, have been made.

The bacteriological division has done a large amount of bacteriological and pathological work, and many letters and much personal approval from the people are on record. The reports of the two departments herewith given show in detail the work done.

RECOMMENDATIONS.

In accordance with the law, which makes it the duty of the State Board of Health to make such recommendations concerning health laws as it may deem proper, we recommend as follows:

SANITARY SCHOOLHOUSES AND TEACHING HYGIENE IN THE PUBLIC SCHOOLS.

We suggest a statute requiring that all schoolhouses hereafter built shall conform to natural sanitary laws; also that the act should contain a clause requiring that hygiene be taught in the public schools. Not less than 10 per cent. of school moneys are now wasted on account of unsanitary schoolhouses, in which start most of our epidemics, and in which are laid the foundations in many for consumption and other diseases in after life. Massachusetts, Michigan and other states have statutes of the character we propose, and better health and progress among the school children has thus been

secured, as well as better health in adult life. There is a great opportunity to strengthen the nation by building sanitary school-houses and in instructing the children in hygiene.

POLLUTION OF STREAMS, WATER SUPPLIES AND SEWERS.

Indiana is an inland state, and is fortunately supplied with numerous streams and lakes, and except in the central and southern portion there is yet abundance of ground water. It is apparent that our streams and lakes are valuable assets, and should be jealously protected from pollution or other destruction. They are sources of beauty and refreshment to the land, sources of a valuable food supply, and must eventually furnish public water supplies. It is this last fact which makes it urgent that early action be taken for their preservation.

The experience of the Indianapolis and of the Muncie water companies demonstrates that the ground water is limited, is growing less and less, and is inadequate for the public supply. For a few years both of the cities named had an abundant pure supply, but gradually the quantity diminished and new wells were bored. This did not relieve the situation, for the new wells penetrated the same water bearing stratum as the old ones, and no increase in quantity was secured.

The Muncie Water Company relieved the situation for a time by making up the deficiency with filtered water from White river, but lately the oil wells above Muncie so badly polluted the river with kerosene products that it was impossible to filter the water. This drove the Muncie company to dam a small creek and establish a water shed. It is certain, however, if stream pollution is permitted to continue, that this supply for Muncie cannot be depended upon.

The Indianapolis Water Company has been compelled to put in extensive filter beds, costing five or six hundred thousand dollars, to filter the water from White river. This filtered water is at present mixed with deep well water (the amount of the latter diminishing daily), and this constitutes the Indianapolis supply. The lesson is—Indianapolis must very soon depend entirely upon the river, and if the gross pollution which now exists is permitted to continue, filtration will become more and more difficult and expensive, and Indianapolis, and also other cities on the shores of White river, will be sorely injured, possibly to a degree to stop their growth. What has occurred along White river will in time occur in all parts of the State, and now seems to be the time to apply the remedy. We pro-

pose a law similar to that of Massachusetts, where these same problems arose some years ago, and which the said law has satisfactorily solved. This law should make it unlawful to deposit sewage, factory wastes, or any polluted matter into streams or lakes, and it should provide that within a certain time that all cities and towns shall dispose of their sewage by well-proven methods known to sanitary science; and that all factories shall, within twelve months from the going into effect of the law, dispose of their wastes in a sanitary way. All of this has been repeatedly accomplished in other states.

As cities and towns are continually making expensive mistakes in the matter of establishing public water supplies and in building sewers and drains, it seems wise to adopt the successful method pursued in Ohio, Massachusetts, Pennsylvania, and other states, to prevent such mistakes, with their consequent money loss and sanitary failure. This method is to require by statutes that all plans and specifications for public water supplies, and for sewers and drains, shall be submitted for the approval of the State Board of Health before the same may be constructed.

For the State Board of Health to properly execute a law of this kind, controlling stream pollution, the water supplies and sewer construction, a sanitary engineering department would be required, and therefore, said law would necessarily create such department. There should be a competent sanitary engineer appointed by the State Board, and a proper appropriation given for the enforcement of the act.

We believe a wise law of this character is absolutely necessary for the promotion of the welfare of the State, and would be an economic measure, and for these reasons we propose the same. We further believe that the protection of the lakes and streams from pollution-destruction is a subject which will not down, and the question about the matter is, Shall the State attend to it now, or do so after disease, death and pecuniary loss compel action?

THE HEALTH LAW.

The Health Law of Indiana was passed in 1891. It does not recognize the advances made in sanitary science since its enactment. For this reason it should be amended. A provision which greatly cripples the law is in regard to health officers. It does not provide that health officers shall be men who are informed in hygiene. Very few doctors have studied hygiene, and, therefore, the usual officer

knows little or nothing of the science. In addition to this defect, officers are appointed for only one year and local authorities may pay such salaries as they deem proper. Not until only such persons are eligible to the place of health officer who have knowledge of the work, and not until the term of office is reasonably extended and the pay made commensurate with the services performed, will the people be properly served.

As the condition now exists, it is only rarely that good men seek the position. In many instances, persons unfitted for the work offer to fill the position for a small sum, and when accepted, they put the money in their pockets and do nothing. This way of doing is bad business, and it is not surprising that money is spent without return. Viewing the old health law of 1891 as a machine, it may be said that several old wheels and levers should be removed and new ones of new design substituted.

We recommend these improvements as wise and of the utmost importance to the profit and to the business of the State.

We most respectfully request that you give these recommendations as to improvement of health laws your careful consideration, and we hope they will secure your support and be recommended in your next message to the General Assembly.

Approved by the State Board of Health and ordered transmitted to the Governor.

FREDERICK A. TUCKER, President.

J. N. HURTY, Secretary.

Minutes of Transactions.

SPECIAL MEETING INDIANA STATE BOARD OF HEALTH.

November 16, 1906.

CALLED TO CONSIDER AND PASS UPON THE MANUSCRIPT OF THE ANNUAL REPORT, AND TO ATTEND TO ANY OTHER BUSINESS THAT MIGHT BE PRESENTED.

Called to order by President Davis at 2 p. m. Present: Drs. Davis, McCoy, Tucker, Hurty.

Mr. Dowling, Deputy Attorney-General, presented the fact that the Huntington County Court had decided, in conjunction with many other issues, that the State Board did not have power to condemn unsanitary schoolhouses.

Mr. Dowling recommended that the case be not appealed because of its many complications and that suit be brought for a mandate to enforce the order of condemnation made against the Polk township schoolhouse. He recommended that an order of the State Board be issued to the Huntington County Board of Health, commanding it to enforce the condemnation order, and supplied the following form:

ORDER FOR CLOSING SCHOOLHOUSE.

To the Board of Commissioners of Huntington County, Indiana:

The State Board of Health of the State of Indiana, in regular session assembled in the city of Indianapolis, Marion county, Indiana, this 16th day of November, 1906, having inquired into the sanitary condition of a certain schoolhouse located in Polk township, Huntington county, Indiana, and known as school No. —, and having, after careful inspection of the same, determined that said building is a nuisance, and dangerous to the health and lives of the pupils attending thereat, that it is wholly unfit for use for school purposes, and that its defects and unsanitary features can not be corrected or removed and said building can not be placed in such a condition or repair as will render it safe for the said pupils to attend school in the same.

Now, therefore, you, as constituting a Board of Health, ex officio, for said county of Huntington, are, according to law, hereby ordered and directed by the State Board of Health of Indiana to close said schoolhouse forthwith for all school purposes, and to forbid and prevent the further holding of school sessions, and the attendance and instruction of pupils, in said building.

You are directed to enforce the above requirements by all proper and legal means.

All of which is hereby ordered by the State Board of Health of Indiana, the year and day above written.

By, President.

Attest:, Secretary.

After full discussion, the recommendations of Mr. Dowling were adopted, and the Secretary was ordered to make out an order to the Huntington County Board of Health as recommended, and send it to the secretary of the Huntington County Board of Health, for him to duly serve upon the county commissioners.

THE T. A. SNYDER PRESERVE COMPANY, OF TIPTON, INDIANA.

The following communication and the following inspection of the plant of the T. A. Snyder Preserve Company at Tipton, were presented for consideration:

STATE OF INDIANA, TIPTON COUNTY, SS:

To the State Board of Health of the State of Indiana: The undersigned would respectfully show to your honorable board that it is a corporation duly organized under the laws of the State of Ohio, and is now, and has been for many years, engaged in manufacturing of tomato catsup. That one of the factories where it manufactures such catsup is located in Tipton, Ind., on the main line of the Lake Erie and Western Railroad. That the farmlands in the vicinity of Tipton are very fertile, and the soil is of such a nature that it produces large crops of very fine quality of tomatoes. That the undersigned has expended several thousand dollars in locating its said factory conveniently for the farmers who raise the tomatoes, and the employees who work in its said factory, and for shipping purposes, and at the time of the location of its said factory it obtained permission of the proper authorities of the city of Tipton to put in a five-inch sewer for its factory and connect it with one of the city sewers at a point about one hundred feet south of its said factory for the purpose of carrying off the waste water. That it put in said five-inch sewer in the summer of 1901, and connected the same with said city sewer, and has used the same ever since for the purpose of carrying off the waste water. That it obtains its supply of water from a driven well over one hundred feet in depth, and the same is pure and wholesome. This water is used in washing the tomatoes as they come from the fields, and in washing the vats in which the catsup is cooked and in washing the floors of the factory, after which it all flows through said five-inch sewer into a large city sewer which runs from a point near said factory south through said city, a distance of about three-quarters of a mile, and empties into a small stream known as Cicero Creek. That said stream is a natural water course and runs through the south part of said city of Tipton, and furnishes the only outlet for all the sewerage of said city, and empties into White river below Noblesville, Indiana. That the population of said city of Tipton is now about five thousand, and there is running water in said creek at all times of the year. The undersigned further says that there is no poisons of any kind or nature in the waste water when it flows from its factory, and that such waste water can be safely discharged into said sewer and stream without injury to the public health, and the undersigned prays that your honorable board grant and issue it a written permit to so discharge

its waste water into said stream, as it has no other way or means by which it can dispose of its waste water.

THE T. A. SNYDER PRES. CO.

STATE OF INDIANA, TIPTON COUNTY, ss:

Comes now, Isaac M. Taylor, who, being duly sworn, upon his oath says that he is now and has been for more than three years last past the local superintendent of the T. A. Snyder Preserve Company, at its factory at Tipton, Indiana, and that all the foregoing statements are true as he verily believes.

ISAAC M. TAYLOR.

Subscribed and sworn to before me this the 3d day of November, 1906.

CHARLES KEMP,

Not. Public.

My commission expires Sept. 24, 1910.

STATE OF INDIANA, TIPTON COUNTY, ss:

Comes now, Isaac M. Taylor, and being duly sworn, upon his oath says that he is now, and has been continuously for more than three years last past, the local superintendent for the T. A. Snyder Preserve Co., at its factory at Tipton, Indiana. That there has been practically no change in the manner of disposing of the waste water from said factory for more than a year last past. That said waste water passes through three screens into a settling vat or pit and then through a five-inch tile outlet about three feet above the bottom of said pit into a large city sewer and through it into Cicero Creek. That said five-inch tile is covered with a screen in said pit, the holes or meshes in said screen being about large enough to let a pea pass therethrough. The said factory is kept and run as carefully and cleanly as the same can be done, and great care is taken to prevent as little vegetable matter from passing into said city sewer as possible.

ISAAC M. TAYLOR.

Subscribed and sworn to before me this 3d day of November, 1906.

CHAS. KEMP,

Not. Public.

My commission expires Sept. 24, 1910.

REPORT OF INSPECTION OF THE T. A. SNYDER PRESERVE COMPANY'S FACTORY, TIPTON, IND.

Gentlemen—In response to a request from the T. A. Snyder Preserve Co., asking for a renewal of their permit to empty the waste water from their factory at Tipton, Ind., into Cicero Creek, I was instructed by Dr. Hurty to make an inspection of their factory and note any changes that may have been made in the past year.

On November 13 I visited Tipton, and in company with Drs. A. W. Gifford and J. T. Tresidder, the county and city health officers, made a thorough inspection of their factory.

The buildings are situated about one-half mile east of the L. E. & W. railway crossing on the north side of the tracks, in the northeast part of

the city, and consist of a two-story brick building, 65x175 feet, and a one-story brick boiler room, 16x30, at the northeast corner. The latter has cement floors. North of the boiler room is a coal shed covered with corrugated iron. The company owns twelve acres of ground abutting on the railway right of way and have the use of 200 acres adjoining upon which to dump their waste and refuse.

The nearest residence to the factory was about 200 yards southwest, on the south side of the railroad tracks, and the second nearest is a farm house about one-fourth mile northeast of the factory.

The work at the factory consists in making catsup exclusively, which is bottled and barreled, and their daily capacity is 125 gross of bottles and 150 barrels of the finished product.

At the time of our inspection, the fruit season was ended and they were working up the second grade products made from the pumice. Everything was in first-class condition and as clean as it was possible to keep it. The washing, cooking and shredding is done in the east end of the building and all tanks are connected with a cement trough which empties through a tile sewer into a catch basin near the southeast corner of the building. The bottom of this catch basin is about three feet lower than the outlet and any seeds or large pieces of vegetable that manage to pass through the wooden screens at the end of the trough, have a chance to settle at the bottom of the basin, which is cleared out two or three times a week during the busy season. There is also a wire screen over the outlet of this basin which prevents anything but liquids from flowing into the city sanitary sewer, with which it is connected by a tile carried under the L. E. & W. railway tracks, about 200 feet south of the tracks, and the waste water is carried by that sewer about one mile south to its outlet into Cicero Creek.

There is another catch basin near the southwest corner of the factory which receives all the waste water from the boiler rooms, bottling rooms and heating tanks where the filled bottles are boiled, which is also connected with the sanitary sewer. There was no odor from the heaps of refuse on the dumping ground north of the building, although the ground was well covered with the waste from the vegetables.

An inspection of the outlet of the sewer at Cicero Creek failed to reveal any odor of vegetable matter or trace of factory refuse. The manager in charge showed us over the factory and explained the details of their work very fully and seemed desirous that we should see everything connected with its sanitary arrangements.

Cicero Creek is the outlet for all the city storm water and sewage, and is a small, shallow stream flowing from southeast to northwest across the south and west part of the city, and at the time of my visit was so low that there was very little current perceptible. In my opinion, it is a benefit to the city to allow the waste water from the Snyder factory to empty into the sanitary sewer, thus assisting in diluting and flushing the sewer.

I recommend the granting of the permit as asked for.

Respectfully submitted,

JAMES L. ANDERSON,
Deputy State Sanitary Inspector.

After discussion, the following resolution and order was passed:

PERMIT TO DISCHARGE WASTE WATER INTO CICERO CREEK.

Whereas, The T. A. Snyder Preserve Company, a corporation owning a plant in Tipton, Indiana, has presented a verified application in writing asking permission to discharge waste matter from their factory into a five-inch sewer which empties into the city sewer, and which city sewer empties into Cicero Creek, and

Whereas, The State Board of Health has made an inspection at and below the point of discharge into Cicero Creek, and finds that the said waste may be safely discharged into said stream without injury to the public, therefore, it is

Ordered, That the T. A. Snyder Preserve Company is permitted to discharge its waste matters, consisting of washings from the factory, into Cicero Creek, through the sewer before named until January 1st, 1908.

Attest:

....., President.
....., Secretary.

Unanimously passed, November 16th, 1906.

Bookcase—The secretary reported lack of bookcase space and asked permission to have additional cases constructed to occupy the wall space in the northwest corner of room No. 24. The situation was inspected and discussed, and it was ordered that the secretary should have the needed cases built.

The secretary reported that according to the authority given him, he had appointed Dr. J. B. Rucker, assistant in the hygiene laboratory of the University of Pennsylvania, to the position of bacteriologist and pathologist in the State Laboratory of Hygiene at an annual salary of \$1,500, Dr. Rucker to take the position December 1st, 1906.

Appointment was unanimously confirmed.

The manuscripts for the reports to the Governor of the work of the Board, the fiscal accounts, and the records of the work of both divisions of the State Laboratory of Hygiene were submitted.

The said manuscripts were read and discussed, and with a few minor changes were adopted, duly signed by all members of the Board, and ordered presented to the Governor.

First Regular Meeting.

REGULAR QUARTERLY MEETING OF THE STATE BOARD OF HEALTH.

January 11, 1907.

**AFFAIRS CONSIDERED OF THE FIRST FISCAL QUARTER OF 1906-7
AND THE LAST CALENDAR QUARTER OF 1906.**

Called to order by President Davis at 2 p. m. Present: Drs. Davis, McCoy, Wishard, Tucker, Hurty.

Minutes of the last regular meeting held October 12, 1906, and the special meeting held November 16, 1906, read and approved.

President called for the report of the Secretary for the calendar quarter, ending December 31, 1906.

REPORT OF SECRETARY FOR THE CALENDAR QUARTER, ENDING DECEMBER 31, 1906.

I have the honor to report that the affairs of the office proceeded satisfactorily during the calendar quarter ending December 31st.

The Secretary made seven visits, as follows:

November 1st.—Tipton, account of invitation of city government to consult in regard to sanitary matters and to deliver an address in the evening on the "Prevention and Cure of Tuberculosis."

November 2d.—Madison, account of smallpox, being invited by the city authorities.

November 20th.—Mexico City, to attend the annual meeting of the American Public Health Association, as per permission of the Board.

December 19th.—Shelbyville, account of invitation of the local Board of Health to visit slaughter houses and meat shops, and to deliver a lecture in the afternoon upon the public health before the Shelby County Farmers' Institute, and in the evening to give a popular lecture upon "The Prevention and Cure of Tuberculosis."

December 31st.—Martinsville, account of invitation of local health officer to help forward the cause of school sanitation and to confer with the mayor and city council upon such subjects.

Full reports of the above visits are herewith given:

Tipton—November 1st I visited Tipton and spent the afternoon in inspecting the sanitary conditions of the city, and later conferred with the mayor and committee of health of the council. Much complaint had been made against a ketchup factory belonging to the Snyder Preserve Co. The washwater and drainings which flow into a city sewer are finally emptied into a small creek. Farmers living on the creek had made complaint that the refuse from the ketchup factory ruined the waters of the creek, making them unfit for cattle to drink and otherwise doing their lands injury. This matter has once been tried in the courts and the first suit was settled by acquitting the defendant. The management of the factory asserts that nothing but scrubblings and floor washings find their way into the sewer, the closets not even being connected with said sewer, but pits in the ground being used. Inspection at the mouth of the sewer showed that the sewage of the city was discharged into a small creek and really constituted a nuisance, ruining the waters of the creek, but there is no relief from any pollution caused by a city.

The high school building was inspected, found to be old and in every way unsanitary. In every room the children were surrounded by unsanitary conditions. Not one room in the building is properly lighted or properly ventilated. All of the facts pertaining to this building were presented to the authorities and it was found that the public was decidedly in favor of erecting a new building, but had been prevented by injunctions and the opposition of a few.

In the evening I delivered a lecture in a church to an audience which overflowed the room. It was entirely popular and given under the auspices of the local Medical Society. I took occasion to deliver a plea in regard to their school houses and told them that their children had for years lived under adverse conditions and that said adverse conditions were getting worse. It is very probable that Tipton will have a new school building within another year. A kind resolution of thanks was passed by the audience for the lecture, and said resolution expressed confidence in and encouragement for the work of the State Board of Health.

Madison—On November 2d I visited Madison on account of smallpox. The disease had again taken hold of that city and I found twenty-three cases in the schoolhouses and four cases under quarantine in houses in the city. Only five of these cases were at all severe; others varied from very mild indeed to moderately severe. As is usual in these epidemics, certain physicians had denied that smallpox existed, and it was this fact that led to the complications.

With a few of the physicians pulling one way and a few another, the local authorities did not know what to do. After visiting the pest houses and examining all the patients there, and also visiting and examining all of the patients in houses under quarantine, I met with the public health committee of the council. The conclusions of the conference were that the conference would meet and commence a vigorous campaign against the disease. They promised to purchase fresh vaccine and offer free vaccination and to rigidly enforce quarantine measures. I took occasion to visit the new school building which is being erected and which is the result of condemnation by this Board of three old dilapidated structures. The new building will be completed by the last of January and the plan showed that every required sanitary feature will be incorporated.

Mexico City—The thirty-fourth annual meeting of the A. P. H. A. was held in the City of Mexico, December 3d, 4th, 5th, 6th and 7th. One hundred and sixty-eight members were present from the United States and a slightly larger number from the Republic of Mexico. The first meeting was promptly called to order at 10 a. m. December 3d, and the scientific section took charge. In this section, everything pertaining to bacteriology, pathology, and everything that is extremely technical, is considered. It is not necessary to give the program here. One of the remarkable papers was delivered by Dr. Kohnke, late health officer of New Orleans. His subject was: "The Yellow Fever Epidemic in New Orleans in 1905."

In this paper Dr. Kohnke reviewed the causes leading up to the yellow fever epidemic in his city and presented lantern views of many situations and told of the many difficulties to be overcome in fighting the disease. Mosquito life was illustrated in all its stages from the actual eggs of the insect through larva, pupa, and finally the developed insect. The most interesting picture was that of the larva, showing how they were killed by oiling the surfaces of the water. The larva were shown in a cell placed in the lantern. At first, they were very active, but after the operator had placed a few drops of kerosene oil upon the surface of the water in a tank, the larva were quickly smothered to death. Dr. Kohnke stated that his picture and demonstrations of the life of the mosquito had been shown in numerous places in New Orleans in the campaign of education which was carried on against yellow fever.

The Mexicans led in the number of papers presented, covering many phases of sanitation. However, as the program shows, not a few papers were read by Canadian and American members. The

social features of the meeting were very delightful. Opportunity was given us to visit the new water works and sewage disposal plants in the city. We also visited the great National Hospital, which has just been completed at the expense of three million dollars, and which is a model in every respect. Not a single sanitary feature has been left out of this hospital. The drainage, ventilation and dietary are perfect. There are baths and a gymnasium, with every appliance which has been invented to aid in the recovery and preservation of health.

The Association visited Vera Cruz and there inspected the new and model quarantine station. Vera Cruz was the former home of yellow fever, but only two cases originated there during the last summer, so rigid and effective has been the fight against the malady. Other cities no longer quarantine against Vera Cruz. It seems unnecessary here to describe the sanitary defenses of this city, for it would take considerable space and they are fully described and illustrated in sanitary magazines. President Diaz graciously received the Association and made a speech of encouragement, saying that this work was one of the noblest that men could engage in.

Shelbyville—December 19th I visited Shelbyville and with the health officer, Dr. Keeney, visited two slaughter-houses and several butcher shops. We inspected the sanitary features of the same. A full report of these inspections was written out by Dr. Keeney and I accompanied him when they were presented to the authorities of the city. Several recommendations were made which the authorities immediately adopted and said they would enforce them. In the afternoon I delivered a lecture upon "School Hygiene" before the Shelby County Farmers' Institute and distributed two hundred of our "Envelope Packages" containing circulars upon the prevention of various diseases. The Institute passed a vote of thanks and confidence in and encouragement for the work of the State Board of Health. In the evening I delivered a lecture upon "The Prevention and Cure of Tuberculosis," before a popular audience, and same was illustrated by a projecting lantern. The audience filled the court-room and many were turned away. It is believed that much good was accomplished by this public lecture. The usual resolutions and thanks were passed.

Martinsville—I visited Martinsville, December 31st, and with Dr. Tilford, secretary of the local Board of Health, visited two school buildings; also made inspection of White river in regard to pollution from Indianapolis. We also inspected several alleys, and with

the city engineer examined and studied the sewer plans of the city. Recommendations were made in connection with every point visited, and same were kindly received, with promises to make changes at the earliest date possible.

The public health for the quarter was not quite as good as in the corresponding period last year. We have to record an increase in smallpox over said period, and also an increase in typhoid fever. The tables here given show the exact status of the report.

SMALLPOX COMPARISON FOR FOURTH CALENDAR QUARTER.

Date.	Number of Cases Reported.	Number of Deaths.	Number of Counties Invaded.
October, 1905.....	0	0	0
October, 1906.....	118	3	9
November, 1905.....	112	1	13
November, 1906.....	216	0	14
December, 1905.....	112	1	13
December, 1906.....	393	1	19
Total, 1905.....	224	3	26
Total, 1906.....	727	4	42

TYPHOID FEVER COMPARISON FOR FOURTH CALENDAR QUARTER.

Date.	Number of Cases Reported.	Number of Deaths.	Number of Counties Invaded.
October, 1905.....	711	152	72
October, 1906.....	732	150	73
November, 1905.....	575	101	62
November, 1906.....	790	135	73
December, 1905.....	306	66	47
December, 1906.....	337	79	50
Total, 1905.....	1,592	319	181
Total, 1906.....	1,859	364	196

There were diphtheria epidemics in sixteen counties and scarlet fever epidemics in twelve. With both these diseases, the cases were mostly mild, yet the deaths were in excess of the corresponding month last year. Consumption still goes on its horrid way, slaying as usual. There is not the slightest abatement in it, as appears by the comparisons.

Dr. J. B. Rucker, Jr., promptly took charge of the bacteriological laboratory December 1st, succeeding Dr. Keene, who resigned. The work of that department has gone forward as if no change had been made, and is satisfactory in every way. The report of the first month under Dr. Rucker is herewith attached:

**REPORT FROM THE DIVISION OF BACTERIOLOGY AND PATHOLOGY
OF THE INDIANA STATE LABORATORY OF HYGIENE.**

To the Board of Health of the State of Indiana :

Sirs—I have the honor to make my report for the month ending December 31, 1906, as follows :

Upon assuming charge as chief of the division of bacteriology and pathology, I found a laboratory well equipped, and having the appearance of order and cleanliness which is essential to good work in all laboratories of bacteriology and pathology.

In reviewing the reports of the examinations made during the month just past, I find that 178 physicians from sixty counties in the state made use of the laboratory during December. We hope to be able in our next report, to show an increase over this in the number of physicians making use of our facilities for scientific examinations.

The list of diseases, suspected specimens of which were submitted for examination, included diphtheria, tuberculosis, typhoid fever, cerebrospinal meningitis, hydrophobia, gonorrhoea, malaria, carcinoma, sarcoma and adeno-sarcoma. One bacteriologic examination of drinking water was made and two specimens of urine were examined for the presence of *B. tuberculosis*.

The following is a detailed account of examinations of specimens submitted, showing positive or negative findings and those of a doubtful or unsatisfactory character, arranged according to the counties from which the specimens were sent :

TYPHOID FEVER.

<i>County.</i>	<i>Positive.</i>	<i>Negative.</i>	<i>Unsatisfactory.</i>
Blackford	2	0	0
Bartholomew	0	1	0
Hendricks	0	1	1
Henry	1	0	0
Johnson	1	0	0
Kosciusko	1	0	0
Laporte	2	1	0
Marion	6	3	0
Posey	1	0	0
Randolph	1	1	0
Spencer	1	1	0
Wayne	0	2	0
White	1	0	0
	—	—	—
	17	10	1
Total			28

DIPHTHERIA.

<i>County.</i>	<i>Positive.</i>	<i>Negative.</i>	<i>Unsatisfactory.</i>
Allen	1	1	0
Bartholomew	1	1	0
Carroll	0	1	0

<i>County.</i>	<i>Positive.</i>	<i>Negative.</i>	<i>Unsatisfactory.</i>
Clark	1	0	0
Delaware	2	4	1
Floyd	1	0	0
Grant	0	1	0
Henry	0	1	0
Howard	0	1	0
Huntington	1	0	0
Jennings	0	1	0
Madison	4	4	0
Marion	5	5	0
Monroe	0	1	0
Montgomery	0	1	0
Randolph	3	3	0
Rush	2	0	1
Tippecanoe	0	1	0
Tipton	2	1	0
Union	1	1	0
Wabash	2	0	0
Wayne	2	1	0
Wells	1	0	0
White	1	2	0
Whitley	0	2	0
	30	33	2
Total			65

TUBERCULOSIS.

<i>County.</i>	<i>Positive.</i>	<i>Negative.</i>
Adams	0	1
Allen	0	1
Bartholomew	1	4
Benton	0	2
Blackford	1	4
Boone	1	0
Carroll	0	2
Clinton	0	1
Crawford	2	1
Davless	1	0
Delaware	3	2
Elkhart	2	1
Floyd	0	1
Fountain	0	2
Gibson	1	0
Hamilton	2	3
Hendricks	1	3
Henry	2	1
Howard	0	1
Jackson	2	2
Jasper	1	1

<i>County.</i>	<i>Positive.</i>	<i>Negative.</i>
Jay	3	0
Jefferson	0	1
Knox	1	1
Kosciusko	1	0
Lagrange	0	2
Lake	0	1
Laporte	1	1
Madison	3	0
Marion	6	15
Marshall	1	0
Martin	0	1
Miami	0	2
Montgomery	0	1
Morgan	1	0
Newton	0	1
Parke	0	1
Posey	1	2
Pulaski	0	3
Putnam	0	1
Randolph	0	1
Ripley	0	1
Starke	0	1
Sullivan	1	1
Tippecanoe	0	2
Tipton	0	2
Union	0	3
Vigo	1	0
Wabash	0	1
Warren	1	0
Wayne	1	4
Wells	0	2
White	0	2
Whitley	1	3
	43	89
Total		132

Of specimens of a miscellaneous character we reported :

Sarcoma of the testicle	1	
Sarcoma of the external ear	1	
Sarcoma of the alveolus	1	
Sarcoma of the axillary glands	1	
Carcinoma of the stomach	1	
Carcinoma of the breast	2	
Adeno-carcinoma of the nose	1	
Cerebro-spinal meningitis	Positive 2	
Hydrophobia	Positive 2	Negative 1
Gonorrhoea	Positive 1	Negative 1
Malaria		Negative 1

B. tuberculosis in urine		Negative 2
Examination of water	1	
Bact. examination of membrane from throat	1	
	15	5
Total		20

The whole number of examinations made during the month of December was 245.

Respectfully,

J. B. RUCKER, M. D.,
Superintendent.

It is impossible in this report to present a summary of the work of the Board for 1906, because such report would not be complete without the consideration of the statistics, and these cannot be tabulated and analyzed within ninety days. Before the next regular meeting a summary for the year will be presented.

As ordered by the Board, the new Health Law and the new Pure Food and Drug Law, as submitted and passed upon by the Board, were resubmitted to the Attorney-General, and at this meeting I present the remodeled and rewritten bills.

After a little discussion, the secretary's report, as read, was ordered to be placed of record.

NEW HEALTH LAW.

The secretary reported that Mr. Dowling, Deputy Attorney-General, had, after study, recommended that the new legislation written by the Board be written as an amendment to the Health Law of 1891. His reasons were that the old law contained no less than five acceptable sections; also it had been amended in 1899, and the amendment declaimed unconstitutional because of the omission, by an engrossing clerk, of one line out of the title of the act amended; also because it would probably be easier to secure an amendment than to secure an entire new law.

The bill was carefully studied by sections and only a few minor changes made, and the secretary was directed to have it introduced into the lower house of the Legislature.

BILL FOR A TUBERCULOSIS HOSPITAL.

Hon. Richard Elliott and Dr. Theo. Potter of the State Tuberculosis Commission, sent a copy of a bill establishing a State Tuberculosis Hospital, for the consideration of the Board. The said bill was carefully reviewed and a few changes suggested. The prin-

cial suggestion was that the official name of the institution be The Indiana State Health Farm. It was also suggested, in connection therewith, that provision be made for local tuberculosis dispensaries.

THE PURE FOOD BILL.

The new Pure Food and Drug Bill, as last revised and written by Deputy Attorney-General Dowling, was read and considered, section by section, and approved.

Work for the coming quarter was discussed, but no orders were given, as a new health law was hoped for from the present Legislature.

SPECIAL MEETING INDIANA STATE BOARD HEALTH.

March 15, 1907.

Called to order by President Davis at 2 p. m. Present: Davis, Tucker, McCoy, Hurty, Wishard.

President Davis announced the object of the meeting was to consider new rules, establishing food and drug standards and declaring specific adulterations, under the new food law. Also to appoint food and drug inspectors, to appoint a drug chemist, to fix salaries and to make rules governing the various departments and to take up such other work as might be presented.

Moved by Tucker and seconded by McCoy, that the various divisions of the State Board of Health shall be:

(1) DEPARTMENT OF ADMINISTRATION, of which the secretary of the Board shall be the head, and through said department all orders of the Board shall issue, and said secretary shall be the chief executive officer of the Board and director of all departments, subject to the supervision of the Board.

(2) DEPARTMENT OF STATISTICS—The chief clerk of vital statistics shall be the head of this department.

(3) BACTERIOLOGICAL AND PATHOLOGICAL LABORATORY, of which the superintendent of the same shall be the head.

(4) FOOD, DRUG AND WATER LABORATORY, of which the chemist of the Board, who is also, under the law, state food and drug commissioner, shall be the head.

(5) The two laboratories named in sections (3) and (4) shall constitute the State Laboratory of Hygiene.

Adopted separately and as a whole.

The Board then took up the consideration of the pure food and drug laws, and after consideration, each rule was adopted singly, and finally they were adopted as a whole. The adoption, as a whole, was unanimous.

FOOD AND DRUG RULES.

RULES OF THE INDIANA STATE BOARD OF HEALTH, ACCORDING TO CHAPTER 104, ACTS OF 1907, ESTABLISHING MINIMUM STANDARDS AND DEFINING SPECIFIC ADULTERATION OF FOODS AND DRUGS.

(Passed March 15, 1907, by the Indiana State Board of Health.)

The Pure Food and Drug Law, approved March 4, 1907, makes it the duty of the State Board of Health to enforce "the laws of the state governing food and drug adulteration" and makes "the chemist of the State Board of Health appointed by said board,.....the state food and drug commissioner." The authority of the state board for making rules is found in Section 7 of the Pure Food and Drug Law as follows: "The State Board of Health shall adopt such rules as may be necessary to enforce this act, and shall adopt rules regulating minimum standards for food and drugs, defining specific adulteration and declaring the proper methods of collecting and examining drugs and articles of food." The same section provides that: "The violation of said rules shall be punished, on conviction, as set forth in Section 10 of this act."

In accordance with the authority above cited, the State Board of Health on March 15, 1907, adopted the following rules for the enforcement of the Pure Food and Drug Act and regulating minimum standards for food and drugs.

These rulings furnish a definite basis for work in the enforcement of the "Pure Food and Drug Law," and are intended to anticipate any question as to the attitude of the State Board of Health in regard to the application of the law to particular articles of food and will be followed in the enforcement of the law.

The definitions and standards adopted are generally those established as official for the United States by the Secretary of Agriculture by authority of an act of Congress approved June 3, 1902; or the standards as given in the latest edition of the United States Pharmacopoeia or National Formulary, or after thorough investigation and trial adopted by many of the states.

EXPLANATORY DEFINITIONS.

1. The manufacturing for sale, offering for sale or having in one's possession to sell, within the State of Indiana, of any adulterated or misbranded drug or article of food, is unlawful.

2. The term "food" as used herein, includes all articles used for food, drink, confectionery or condiment by man or other animals, whether simple, mixed or compounded.

3. The term "drug" as used herein, includes all medicines and preparations recognized in the United States Pharmacopoeia or National Formulary, for internal or external use, and any substance or mixture of substances intended to be used for the cure, mitigation or prevention of disease of either man or other animal.

4. An article shall be deemed to be adulterated within the meaning of Section 2 of the General Food Law:

A—IN THE CASE OF DRUGS.

1. If when sold under or by a name recognized in the United States Pharmacopoeia or National Formulary it differs from the standard of strength, quality or purity as determined by the test laid down in the United States Pharmacopoeia or National Formulary official at the time of investigation: Provided, That no drug as above defined shall be deemed to be adulterated if the standard of strength, quality or purity be plainly stated upon the box, bottle or other container thereof, although the standard may be different from that given in the United States Pharmacopoeia or National Formulary.

2. If its strength or purity fall below the professed standard or quality under which it is sold.

B—IN CASE OF FOOD.

First. If any substance or substances have been mixed with it so as to reduce, or lower, or injuriously affect its quality or strength;

Second. If any substance has been substituted wholly or in part for the article;

Third. If any valuable constituent has been wholly or in part abstracted from it;

Fourth. If it consists in any proportion of a filthy, diseased, decomposed, putrid or rotten animal or vegetable substance, whether manufactured or not, or in the case of milk, if it is the product of a diseased animal;

Fifth. If it is mixed, colored, coated, polished, powdered or strained in a manner whereby damage or inferiority is concealed, or whereby it is made to appear better or of greater value than it really is;

Sixth. If it contains any added poisonous or other added deleterious ingredient;

Seventh. If it contains any added antiseptic or preservative substance except common table salt, saltpeter, cane sugar, vinegar, spices or in smoked food, the natural products of the smoking process, or other harmless preservatives whose use is authorized by the State Board of Health.

RULES REGULATING MINIMUM STANDARDS FOR FOOD AND DRUGS, AND DEFINING SPECIFIC ADULTERATION.

I. ANIMAL PRODUCTS.

A. MEATS AND THE PRINCIPAL MEAT PRODUCTS.

a. Meats.

1. **MEAT, FLESH**, is any clean, sound, dressed, and properly prepared edible part of animals in good health at the time of slaughter, and if it bears a name descriptive of its kind, composition, or origin, it corresponds thereto. The term "animal," as herein used, includes not only mammals, but fish, fowl, crustaceans, mollusks, and all other animals used as food.

2. **FRESH MEAT** is meat from animals recently slaughtered and properly cooled until delivered to the consumer.

3. **COLD STORAGE MEAT** is meat from animals recently slaughtered and preserved by refrigeration until delivered to the consumer.

4. **SALTED, PICKLED AND SMOKED MEATS** are unmixd meats preserved by salt, sugar, vinegar, spices, or smoke, singly or in combination, whether in bulk or in suitable containers.*

b. Manufactured Meats.

1. **MANUFACTURED MEATS** are meats not included in paragraphs 2, 3, and 4, whether simple or mixed, whole or comminuted, in bulk or in suitable containers, with or without the addition of salt, sugar, vinegar, spices, smoke, oils, or rendered fat. If they bear names descriptive of kind, composition, or origin, they correspond thereto and when bearing such descriptive names, if force or flavoring meats are used, the kind and quantity thereof are made known.

c. Lard.

1. **LARD** is the rendered fresh fat from hogs in good health at the time of slaughter, is clean, free from rancidity, and contains, necessarily incorporated in the process of rendering, not more than one (1) per cent. of substances, other than fatty acids and fat.

2. **LEAF LARD** is lard rendered at moderately high temperature from the internal fat of the abdomen of the hog, excluding that adherent to the intestines, and has an iodine number not greater than sixty (60).

3. **NEUTRAL LARD** is lard rendered at low temperatures.

*Suitable containers for keeping moist food products, such as sirups, honey, condensed milk, soups, meat extracts, meats, manufactured meats, and undried fruits and vegetables, and wrappers in contact with food products, contain on their surfaces, in contact with the food product, no lead, antimony, arsenic, zinc or copper or any compounds thereof or any other poisonous or injurious substance. If the containers are made of tin plate they are outside-soldered and the plate in no place contains less than one hundred and thirteen (113) milligrams of tin on a piece five (5) centimeters square or one and eight-tenths (1.8) grains on a piece two (2) inches square.

The inner coating of the containers is free from pin holes, blisters, and cracks. If the tin plate is lacquered, the lacquer completely covers the lined surface within the container and yields to the contents of the container no lead, antimony, arsenic, zinc or copper or any compounds thereof, or any other poisonous or injurious substance.

B. MILK AND ITS PRODUCTS.

a. Milks.

1. **MILK** is the fresh, clean, lacteal secretion obtained by the complete milking of one or more healthy cows, properly fed and kept, excluding that obtained within fifteen days before and ten days after calving, and contains not less than eight and one-half (8.5) per cent. of solids not fat, and not less than three and one-quarter (3.25) per cent. of milk fat.

2. **BLENDED MILK** is milk modified in its composition so as to have a definite and stated percentage of one or more of its constituents.

3. **SKIM MILK** is milk from which a part or all of the cream has been removed and contains not less than nine and one-quarter (9.25) per cent. of milk solids.

4. **PASTEURIZED MILK** is milk that has been heated below boiling but sufficiently to kill most of the active organisms present and immediately cooled to 50° Fahr. or lower.

5. **STERILIZED MILK** is milk that has been heated at the temperature of boiling water or higher for a length of time sufficient to kill all organisms present.

6. **CONDENSED MILK, EVAPORATED MILK**, is milk from which a considerable portion of water has been evaporated and contains not less than twenty-eight (28) per cent. of milk solids of which not less than twenty-seven and five-tenths (27.5) per cent. is milk fat.

7. **SWEETENED CONDENSED MILK** is milk from which a considerable portion of water has been evaporated and to which sugar (sucrose) has been added, and contains not less than twenty-eight (28) per cent. of milk solids, of which not less than twenty-seven and five-tenths (27.5) per cent. is milk fat.

8. **CONDENSED SKIM MILK** is skim milk from which a considerable portion of water has been evaporated.

9. **BUTTERMILK** is the product that remains when butter is removed from milk or cream in the process of churning.

10. **GOAT'S MILK, EWE'S MILK, ETCETERA**, are the fresh, clean, lacteal secretions, free from colostrum, obtained by the complete milking of healthy animals other than cows, properly fed and kept, and conform in name to the species of animal from which they are obtained.

b. Cream.

1. **CREAM** is that portion of milk, rich in milk fat, which rises to the surface of milk on standing, or is separated from it by centrifugal force, is fresh and clean and contains not less than eighteen (18) per cent. of milk fat.

2. **EVAPORATED CREAM, CLOTTED CREAM**, is cream from which a considerable portion of water has been evaporated.

c. Milk Fat or Butter Fat.

1. **MILK FAT, BUTTER FAT**, is the fat of milk and has a Reichert-Meissl number not less than twenty-four (24) and a specific gravity not less than 0.905 ($\frac{40^{\circ} \text{C.}}{40^{\circ} \text{C.}}$)

d. Butter.

1. **BUTTER** is the clean, non-rancid product made by gathering in any manner the fat of fresh or ripened milk or cream into a mass, which also contains a small portion of the other milk constituents, with or without salt, and contains not less than eighty-two and five-tenths (82.5) per cent. of milk fat. By acts of Congress approved August 2, 1886, and May 9, 1902, butter may also contain added coloring matter.

2. **RENOVATED BUTTER, PROCESS BUTTER**, is the product made by melting butter and reworking, without the addition or use of chemicals or any substances except milk, cream, or salt, and contains not more than sixteen (16) per cent. of water and at least eighty-two and five-tenths (82.5) per cent. of milk fat.

e. Cheese.

1. **CHEESE** is the sound, solid, and ripened product made from milk or cream by coagulating the casein thereof with rennet or lactic acid, with or without the addition of ripening ferments and seasoning, and contains, in the water-free substance, not less than fifty (50) per cent. of milk fat. By act of Congress, approved June 6, 1896, cheese may also contain added coloring matter.

2. **SKIM MILK CHEESE** is the sound, solid, and ripened product, made from skim milk by coagulating the casein thereof with rennet or lactic acid, with or without the addition of ripening ferments and seasoning.

3. **GOAT'S MILK CHEESE, EWE'S MILK CHEESE, ETCETERA**, are the sound, ripened products made from the milks of animals specified, by coagulating the casein thereof with rennet or lactic acid, with or without the addition of ripening ferments and seasoning.

f. Ice Cream.

ICE CREAM is a frozen product containing not less than 8 per cent. of butter fat and 18 per cent. of milk solids, with the addition of sugar (sucrose) and with or without natural flavoring and not to exceed seven-tenths of one per cent. of gelatine.

FRUITS, NUTS, candied and preserved fruits and nuts, chocolate and other similar products shall be classed as flavorings and ice cream containing such ingredients shall conform to the standard above specified.

g. Miscellaneous Milk Products.

1. **WHEY** is the product remaining after the removal of fat and casein from milk in the process of cheese-making.

2. **KUMISS** is the product made by the alcoholic fermentation of mare's or cow's milk.

II. VEGETABLE PRODUCTS.

A. GRAIN PRODUCTS.

a. Grains and Meals.

1. **GRAIN** is the fully matured, clean, sound, air-dry seed of wheat, malze, rice, oats, rye, buckwheat, barley, sorghum, millet, or spelt.

2. **MEAL** is the clean, sound product made by grinding grain.

3. **FLOUR** is the fine, clean, sound product made by bolting wheat meal and contains not more than thirteen and one-half (13.5) per cent. of moisture, not less than one and twenty-five hundredths (1.25) per cent. of nitrogen, not more than one (1) per cent. of ash, and not more than fifty hundredths (0.50) per cent. of fiber.

4. **GRAHAM FLOUR** is unbolted wheat meal.

5. **GLUTEN FLOUR** is the clean, sound product made from flour by the removal of starch and contains not less than five and six-tenths (5.6) per cent. of nitrogen and not more than ten (10) per cent. of moisture.

6. **MAIZE MEAL, CORN MEAL, INDIAN CORN MEAL**, is meal made from sound maize grain and contains not more than fourteen (14) per cent. of moisture, not less than one and twelve hundredths (1.12) per cent. of nitrogen, and not more than one and six-tenths (1.6) per cent. of ash.

7. **RICE** is the hulled, or hulled and polished grain of *Oryza sativa*.

8. **OATMEAL** is meal made from hulled oats and contains not more than twelve (12) per cent. of moisture, not more than one and five-tenths (1.5) per cent. of crude fiber, not less than two and twenty-four hundredths (2.24) per cent. of nitrogen, and not more than two and two-tenths (2.2) per cent. of ash.

9. **RYE FLOUR** is the fine, clean, sound product made by bolting rye meal and contains not more than thirteen and one-half (13.5) per cent. of moisture, not less than one and thirty-six hundredths (1.36) per cent. of nitrogen, and not more than one and twenty-five hundredths (1.25) per cent. of ash.

10. **BUCKWHEAT FLOUR** is bolted buckwheat meal and contains not more than twelve (12) per cent. of moisture, not less than one and twenty-eight hundredths (1.28) per cent. of nitrogen, and not more than one and seventy-five hundredths (1.75) per cent. of ash.

B. FRUIT AND VEGETABLES.

a. **Fruit and Fruit Products.** (Except fruit juices, fresh, sweet, and fermented, and vinegars).

1. **FRUITS** are the clean, sound, edible, fleshy fructifications of plants, distinguished by their sweet, acid, and ethereal flavors.

2. **DRIED FRUIT** is the clean, sound product made by drying mature, properly prepared, fresh fruit in such a way as to take up no harmful substance, and conforms in name to the fruit used in its preparation; sundried fruit is dried fruit made by drying without the use of artificial means; evaporated fruit is dried fruit made by drying with the use of artificial means.

3. **EVAPORATED APPLES** are evaporated fruit made from peeled and cored apples, and contain not more than twenty-seven (27) per cent. of moisture determined by the usual commercial method of drying for four (4) hours at the temperature of boiling water.

4. **CANNED FRUIT** is the sound product made by sterilizing clean, sound, properly matured and prepared fresh fruit, by heating, with or without sugar (sucrose) and spices, and keeping in suitable, clean, hermetically sealed containers and conforms in name to the fruit used in its preparation.

5. **PRESERVE** is the sound product made from clean, sound, properly matured and prepared fresh fruit and sugar (sucrose) sirup, with or without spices or vinegar, and conforms in name to that of the fruit used, and in its preparation not less than forty-five (45) pounds of fruit are used to each fifty-five (55) pounds of sugar.

6. **HONEY PRESERVE** is preserve in which honey is used in place of sugar (sucrose) sirup.

7. **GLUCOSE PRESERVE** is preserve in which a glucose product is used in place of sugar (sucrose) sirup.

8. **JAM, MARMALADE**, is the sound produce made from clean, sound, properly matured and prepared fresh fruit and sugar (sucrose), with or without spices or vinegar, by boiling to a pulpy or semisolid consistence, and conforms in name to the fruit used, and in its preparation not less than forty-five (45) pounds of fruit are used to each fifty-five (55) pounds of sugar.

9. **GLUCOSE JAM, GLUCOSE MARMALADE**, is jam in which a glucose product is used in place of sugar (sucrose).

10. **FRUIT BUTTER** is the sound product made from fruit juice and clean, sound, properly matured and prepared fruit, evaporated to a semi-solid mass of homogeneous consistence, with or without the addition of sugar and spices or vinegar, and conforms in name to the fruit used in its preparation.

11. **GLUCOSE FRUIT BUTTER** is fruit butter in which a glucose product is used in place of sugar (sucrose).

12. **JELLY** is the sound, semisolid, gelatinous product made by boiling clean, sound, properly matured and prepared fresh fruit with water, concentrating the expressed and strained juice, to which sugar (sucrose) is added, and conforms in name to the fruit used in its preparation.

13. **GLUCOSE JELLY** is jelly in which a glucose product is used in place of sugar (sucrose).

b. Vegetables and Vegetable Products.

1. **VEGETABLES** are the succulent, clean, sound, edible parts of herbaceous plants used for culinary purposes.

2. **DRIED VEGETABLES** are the clean, sound products made by drying properly matured and prepared vegetables in such a way as to take up no harmful substance, and conform in name to the vegetables used in their preparation; sun-dried vegetables are dried vegetables made by drying without the use of artificial means; evaporated vegetables are dried vegetables made by drying with the use of artificial means.

3. **CANNED VEGETABLES** are sound, properly matured and prepared fresh vegetables, with or without salt, sterilized by heat, with or without previous cooking in vessels from which they take up no metallic substance, kept in suitable, clean, hermetically sealed containers, are sound and conform in name to the vegetables used in their preparation.

4. **PICKLES** are clean, sound, immature cucumbers, properly prepared, without taking up any metallic compound other than salt, and preserved in any kind of vinegar, with or without spices; pickled onions, pickled beets, pickled beans, and other pickled vegetables are vegetables prepared as described above and conform in name to the vegetables used.

5. **SALT PICKLES** are clean, sound, immature cucumbers, preserved in a solution of common salt, with or without spices.

6. **SWEET PICKLES** are pickled cucumbers or other vegetables in the preparation of which sugar (sucrose) is used.

7. **SAUERKRAUT** is clean, sound, properly prepared cabbage, mixed with salt, and subjected to fermentation.

8. **CATCHUP (KETCHUP, CATSUP)** is the clean, sound product made from the properly prepared pulp of clean, sound, fresh, ripe tomatoes, with spices and with or without sugar and vinegar; mushroom catchup, walnut catchup, etcetera, are catchups made as above described, and conform in name to the substances used in their preparation.

C. SUGARS AND RELATED SUBSTANCES.

a. Sugar and Sugar Products.

Sugars.

1. **SUGAR** is the product chemically known as sucrose (saccharose) chiefly obtained from sugar cane, sugar beets, sorghum, maple, and palm.

2. **GRANULATED, LOAF, CUT MILLED, AND POWDERED SUGARS** are different forms of sugar and contain at least ninety-nine and five-tenths (99.5) per cent. of sucrose.

3. **MAPLE SUGAR** is the solid product resulting from the evaporation of maple sap, and contains, in the water-free substance, not less than sixty-five one-hundredths (0.65) per cent. of maple sugar ash.

4. **MASSECUITE, MELADA, MUSH SUGAR, AND CONCRETE** are products made by evaporating the purified juice of a sugar-producing plant, or a solution of sugar, to a solid or semisolid consistence, and in which the sugar chiefly exists in a crystalline state.

Molasses and Refiners' Sirup.

1. **MOLASSES** is the product left after separating the sugar from massecuite, melada, mush sugar, or concrete, and contains not more than twenty-five (25) per cent. of water and not more than five (5) per cent. of ash.

2. **REFINERS' SIRUP, TREACLE**, is the residual liquid product obtained in the process of refining raw sugars and contains not more than twenty-five (25) per cent. of water and not more than eight (8) per cent. of ash.

Sirup.

1. **SIRUP** is the sound product made by purifying and evaporating the juice of a sugar-producing plant without removing any of the sugar.

2. **SUGAR-CANE SIRUP** is sirup made by the evaporation of the juice of the sugar cane or by the solution of sugar-cane concrete, and contains not more than thirty (30) per cent. of water and not more than two and five-tenths (2.5) per cent. of ash.

3. **SORGHUM SIRUP** is sirup made by the evaporation of sorghum juice or by the solution of sorghum concrete, and contains not more than thirty (30) per cent. of water and not more than two and five-tenths (2.5) per cent. of ash.

4. **MAPLE SIRUP** is sirup made by the evaporation of maple sap or by the solution of maple concrete, and contains not more than thirty-two (32) per cent. of water and not less than forty-five hundredths (0.45) per cent. of maple sirup ash.

5. **SUGAR SIRUP** is the product made by dissolving sugar to the consistence of a sirup and contains not more than thirty-five (35) per cent. of water.

b. Glucose Products.

1. **STARCH SUGAR** is the solid product made by hydrolyzing starch or a starch-containing substance until the greater part of the starch is converted into dextrose. Starch sugar appears in commerce in two forms, anhydrous starch sugar and hydrous starch sugar. The former, crystallized without water of crystallization, contains not less than ninety-five (95) per cent. of dextrose and not more than eight-tenths (0.8) per cent. of ash. The latter, crystallized with water of crystallization, is of two varieties—70 sugar, also known as brewers' sugar, contains not less than seventy (70) per cent. of dextrose and not more than eight-tenths (0.8) per cent. of ash; 80 sugar, climax or acme sugar, contains not less than eighty (80) per cent. of dextrose and not more than one and one-half (1.5) per cent. of ash.

The ash of all these products consists almost entirely of chlorids and sulphates.

2. **GLUCOSE, MIXING GLUCOSE, CONFECTIONER'S GLUCOSE**, is a thick, sirupy, colorless product made by incompletely hydrolyzing starch, or a starch-containing substance, and decolorizing and evaporating the product. It varies in density from forty-one (41) to forty-five (45) degrees Baumé at a temperature of 100° Fahr. (37.7° C.), and conforms in density, within these limits, to the degree Baumé it is claimed to show, and for a density of forty-one (41) degrees Baumé contains not more than twenty-one (21) per cent. and for a density of forty-five (45) degrees not more than fourteen (14) per cent. of water. It contains on a basis of forty-one (41) degrees Baumé not more than one (1) per cent. of ash, containing chiefly of chlorids and sulphates.

c. Candy.

1. **CANDY** is a product made from a saccharine substance or substances with or without the addition of harmless coloring, flavoring, or filling materials and contains no terra alba, barytes, talc, chrome yellow, or other mineral substances, or poisonous colors or flavors, or other ingredients deleterious or detrimental to health, or any vinous, malt, or spirituous liquor or compound, or narcotic drug.

d. Honey.

1. **HONEY** is the nectar and saccharine exudations of plants gathered, modified, and stored in the comb by honey bees (*Apis mellifica* and *A. dorsata*); is laevo-rotary, contains not more than twenty-five (25) per cent. of water, not more than twenty-five hundredths (0.25) per cent. of ash, and not more than eight (8) per cent. of sucrose.

2. **COMB HONEY** is honey contained in the cells of comb.

3. **EXTRACTED HONEY** is honey which has been separated from the uncrushed comb by centrifugal force or gravity.

4. **STRAINED HONEY** is honey removed from the crushed comb by straining or other means.

D. CONDIMENTS (EXCEPT VINEGAR AND SALT).

a. Spices.

1. **SPICES** are aromatic vegetable substances used for the seasoning of food and from which no portion of any volatile oil or other flavoring principle has been removed and which are clean, sound, and true to name.

2. **ALLSPICE, PIMENTO**, is the dried fruit of the *Pimenta pimenta* (L.) Karst., and contains not less than eight (8) per cent. of quercitanic acid*; not more than six (6) per cent. of total ash, not more than five-tenths (0.5) per cent. of ash insoluble in hydrochloric acid, and not more than twenty-five (25) per cent. of crude fiber.

3. **ANISE** is the fruit of the *Pimpinella anisum* L.

4. **BAY LEAF** is the dried leaf of *Laurus nobilis* L.

5. **CAPERS** are the flower buds of *Capparis spinosa* L.

6. **CARAWAY** is the fruit of *Carum carvi* L.

Cayenne and Red Peppers.

7. **RED PEPPER** is the red, dried, ripe fruit of any species of *Capsicum*.

8. **CAYENNE PEPPER, CAYENNE**, is the dried, ripe fruit of *Capsicum frutescens* L., *Capsicum baccatum* L., or some other small-fruited species of *Capsicum*, and contains not less than fifteen (15) per cent. of nonvolatile ether extract; not more than six and five-tenths (6.5) per cent. of ash insoluble in hydrochloric acid; not more than one and five-tenths (1.5) per cent. of starch, and not more than twenty-eight (28) per cent. of crude fiber.

9. **PAPRIKA** is the dried ripe fruit of *Capsicum annum* L., or some other large-fruited species of *Capsicum*, excluding seeds and stems.

10. **CELERY SEED** is the dried fruit of *Aplum graveolens* L.

11. **CINNAMON** is the dried bark of any species of the genus *Cinnamomum* from which the outer layers may or may not have been removed.

12. **TRUE CINNAMON** is the dried inner bark of *Cinnamomum zeylanicum* Breyne.

13. **CASSIA** is the dried bark of various species of *Cinnamomum*, other than *Cinnamomum zeylanicum*, from which the outer layers may or may not have been removed.

14. **CASSIA BUDS** are the dried immature fruit of species of *Cinnamomum*.

15. **GROUND CINNAMON, GROUND CASSIA**, is a powder consisting of cinnamon, cassia, or cassia buds, or a mixture of these spices, and contains not more than six (6) per cent. of total ash and not more than two (2) per cent. of sand.

16. **CLOVES** are the dried flower buds of *Caryophyllus aromaticus* L., which contain not more than five (5) per cent. of clove stems; not less than

*Calculated from the total oxygen absorbed by the aqueous extract.

ten (10) per cent. of volatile ether extract; not less than twelve (12) per cent. of quercitannic acid*; not more than eight (8) per cent. of total ash; not more than five-tenths (0.5) per cent. of ash insoluble in hydrochloric acid, and not more than ten (10) per cent. of crude fiber.

17. CORIANDER is the dried fruit of *Coriandrum sativum* L.

18. CUMIN SEED is the fruit of *Cuminum cyminum* L.

19. DILL SEED is the fruit of *Anethum graveolens* L.

20. FENNEL is the fruit of *Foeniculum foeniculum* (L.) Karst.

21. GINGER is the washed and dried or decorticated and dried rhizome of *Zinziber zinziber* (L.) Karst., and contains not less than forty-two (42) per cent. of starch; not more than eight (8) per cent. of crude fiber, not more than six (6) per cent. of total ash, not more than one (1) per cent. of lime, and not more than three (3) per cent. of ash insoluble in hydrochloric acid.

22. LIMED GINGER, BLEACHED GINGER, is whole ginger coated with carbonate of lime and contains not more than ten (10) per cent. of ash, not more than four (4) per cent. of carbonate of lime, and conforms in other respects to the standard for ginger.

23. HORSE RADISH is the root of *Roripa armoracia* (L.) Hitchcock, either by itself or ground and mixed with vinegar.

24. MACE is the dried arillus of *Myristica fragrans* Houttuyn, and contains not less than twenty (20) nor more than thirty (30) per cent. of nonvolatile ether extract, not more than three (3) per cent. of total ash, and not more than five-tenths (0.5) per cent. of ash insoluble in hydrochloric acid, and not more than ten (10) per cent. of crude fiber.

25. MACASSAR MACE, PAPUA MACE, is the dried arillus of *Myristica argentea* Warb.

26. BOMBAY MACE is the dried arillus of *Myristica malabarica* Lamarck.

27. MAJORAM is the leaf, flower and branch of *Majorana majorana* (L.) Karst.

28. MUSTARD SEED is the seed of *Sinapis alba* L. (white mustard), *Brassica nigra* (L.) Koch (black mustard), or *Brassica juncea* (L.) Cosson (black or brown mustard).

29. GROUND MUSTARD is a powder made from mustard seed, with or without the removal of the hulls and a portion of the fixed oil, and contains not more than two and five-tenths (2.5) per cent. of starch and not more than eight (8) per cent. of total ash.

30. PREPARED MUSTARD, GERMAN MUSTARD, FRENCH MUSTARD, MUSTARD PASTE, is a paste composed of a mixture of ground mustard seed or mustard flour with salt, spices and vinegar, and, calculated free from water, fat and salt, contains not more than twenty-four (24) per cent. of carbohydrates calculated as starch, determined according to the official methods, not more than twelve (12) per cent. of crude fiber nor less than thirty-five (35) per cent. of protein, derived solely from the materials named.

31. NUTMEG is the dried seed of the *Myristica fragrans* Hottuyn, deprived of its testa, with or without a thin coating of lime, and contains not less than twenty-five (25) per cent. of nonvolatile ether extract, not more than five (5) per cent. of total ash, not more than five-tenths (0.5)

*Calculated from the total oxygen absorbed by the aqueous extract.

per cent. of ash insoluble in hydrochloric acid, and not more than ten (10) per cent. of crude fiber.

32. **MACASSAR NUTMEG, PAPUA NUTMEG, MALE NUTMEG, LONG NUTMEG**, is the dried seed of *Myristica argentea* Warb, deprived of its testa.

Pepper.

33. **BLACK PEPPER** is the dried immature berry of *Piper nigrum* L. and contains not less than six (6) per cent. of nonvolatile ether extract, not less than twenty-five (25) per cent. of starch, not more than seven (7) per cent. of total ash, not more than two (2) per cent. of ash insoluble in hydrochloric acid, and not more than fifteen (15) per cent. of crude fiber. One hundred parts of the nonvolatile ether extract contains not less than three and one-quarter (3.25) parts of nitrogen.

GROUND BLACK PEPPER is the product made by grinding the entire berry and contains the several parts of the berry in their normal proportions.

34. **LONG PEPPER** is the dried fruit of *Piper longum* L.

35. **WHITE PEPPER** is the dried mature berry of *Piper nigrum* L. from which the outer coating or the outer and inner coatings have been removed and contains not less than six (6) per cent. of nonvolatile ether extract, not less than fifty (50) per cent. of starch, not more than four (4) per cent. of total ash, not more than five-tenths (0.5) per cent. of ash insoluble in hydrochloric acid, and not more than five (5) per cent. of crude fiber. One hundred parts of the nonvolatile ether extract contain not less than four (4) parts of nitrogen.

36. **SAFFRON** is the dried stigma of *Crocus sativus* L.

37. **SAGE** is the leaf of *Salvia officinalis* L.

38. **SAVORY, SUMMER SAVORY**, is the leaf, blossom, and branch of *Satureja hortensis* L.

39. **THYME** is the leaf and tip of blooming branches of *Thymus vulgaris* L.

b. Flavoring Extracts.*

1. A **FLAVORING EXTRACT** is a solution in ethyl alcohol of proper strength of the sapid and odorous principles derived from an aromatic plant, or parts of the plant, with or without its coloring matter, and conforms in name to the plant used in its preparation.

2. **ALMOND EXTRACT** is the flavoring extract prepared from oil of bitter almonds, free from hydrocyanic acid, and contains not less than one (1) per cent. by volume of oil of bitter almonds.

2a. **OIL OF BITTER ALMONDS**, commercial, is the volatile oil obtained from the seed of the bitter almond (*Amygdalus communis* L.), the apricot (*Prunus armeniaca* L.), or the peach (*Amygdalus persica* L.).

3. **ANISE EXTRACT** is the flavoring extract prepared from oil of anise, and contains not less than three (3) per cent. by volume of oil of anise.

3a. **OIL OF ANISE** is the volatile oil obtained from the anise seed.

4. **CELERY SEED EXTRACT** is the flavoring extract prepared from celery seed or the oil of celery seed, or both, and contains not less than three-tenths (0.3) per cent. by volume of oil of celery seed.

*The flavoring extracts herein described are intended solely for food purposes and are not to be confounded with similar preparations described in the Pharmacopœia for medicinal purposes.

4a. OIL OF CELERY SEED is the volatile oil obtained from celery seed.

5. CASSIA EXTRACT is the flavoring extract prepared from oil of cassia and contains not less than two (2) per cent. by volume of oil of cassia.

5a. OIL OF CASSIA is the lead-free volatile oil obtained from the leaves of bark of *Cinnamomum cassia* Bl., and contains not less than seventy-five (75) per cent. by weight of cinnamic aldehyde.

6. CINNAMON EXTRACT is the flavoring extract prepared from oil of cinnamon, and contains not less than two (2) per cent. by volume of oil of cinnamon.

6a. OIL OF CINNAMON is the lead-free volatile oil obtained from the bark of the Ceylon cinnamon (*Cinnamomum zeylanicum* Breyn), and contains not less than sixty-five (65) per cent. by weight of cinnamic aldehyde and not more than ten (10) per cent. by weight of eugenol.

7. CLOVE EXTRACT is the flavoring extract prepared from oil of cloves, and contains not less than two (2) per cent. by volume of oil of cloves.

7a. OIL OF CLOVES is the lead-free, volatile oil obtained from cloves.

8. GINGER EXTRACT is the flavoring extract prepared from ginger and contains in each one hundred (100) cubic centimeters, the alcohol-soluble matters from not less than twenty (20) grams of ginger.

9. LEMON EXTRACT is the flavoring extract prepared from oil of lemon, or from lemon peel, or both, and contains not less than five (5) per cent. by volume of oil of lemon.

9a. OIL OF LEMON is the volatile oil obtained, by expression or alcoholic solution, from the fresh peel of the lemon (*Citrus limonum* L.), has an optical rotation (25° C.) of not less than +60° in a 100-millimeter tube, and contains not less than four (4) per cent. by weight of citral.

10. TERPENELESS EXTRACT OF LEMON is the flavoring extract prepared by shaking oil of lemon with dilute alcohol, or by dissolving terpeneless oil of lemon in dilute alcohol, and contains not less than two-tenths (0.2) per cent. by weight of citral derived from oil of lemon.

10a. TERPENELESS OIL OF LEMON is oil of lemon from which all or nearly all of the terpenes have been removed.

11. NUTMEG EXTRACT is the flavoring extract prepared from oil of nutmeg, and contains not less than two (2) per cent. by volume of oil of nutmeg.

11a. OIL OF NUTMEG is the volatile oil obtained from nutmegs.

12. ORANGE EXTRACT is the flavoring extract prepared from oil of orange, or from orange peel, or both, and contains not less than five (5) per cent. by volume of oil of orange.

12a. OIL OF ORANGE is the volatile oil obtained, by expression or alcoholic solution, from the fresh peel of the orange (*Citrus aurantium* L.) and has an optical rotation (25° C.) of not less than +95° in a 100-millimeter tube.

13. TERPENELESS EXTRACT OF ORANGE is the flavoring extract prepared by shaking oil of orange with dilute alcohol, or by dissolving terpeneless oil of orange in dilute alcohol, and corresponds in flavoring strength to orange extract.

13a. TERPENELESS OIL OF ORANGE is oil of orange from which all or nearly all of the terpenes have been removed.

14. PEPPERMINT EXTRACT is the flavoring extract prepared from oil of peppermint, or from peppermint, or both, and contains not less than three (3) per cent. by volume of oil of peppermint.

14a. PEPPERMINT is the leaves and flowering tops of *Mentha pip-erita* L.

14b. OIL OF PEPPERMINT is the volatile oil obtained from peppermint and contains not less than fifty (50) per cent. by weight of menthol.

15. ROSE EXTRACT is the flavoring extract prepared from otto of roses, with or without red rose petals, and contains not less than four-tenths (0.4) per cent. by volume of otto of roses.

15a. OTTO OF ROSES is the volatile oil obtained from the petals of *Rosa damascena* Mill., *R. centifolia* L., or *R. moschata* Herrm.

16. SAVORY EXTRACT is the flavoring extract prepared from oil of savory, or from savory, or both, and contains not less than thirty-five hundredths (0.35) per cent. by volume of oil of savory.

16a. OIL OF SAVORY is the volatile oil obtained from savory.

17. SPEARMINT EXTRACT is the flavoring extract prepared from oil of spearmint, or from spearmint, or both, and contains not less than three (3) per cent. by volume of oil of spearmint.

17a. SPEARMINT is the leaves and flowering tops of *Mentha spicata* L.

17b. OIL OF SPEARMINT is the volatile oil obtained from spearmint.

18. STAR ANISE EXTRACT is the flavoring extract prepared from oil of star anise, and contains not less than three (3) per cent. by volume of oil of star anise.

18a. OIL OF STAR ANISE is the volatile oil distilled from the fruit of the star anise (*Illicium verum* Hook).

19. SWEET BASIL EXTRACT is the flavoring extract prepared from oil of sweet basil, or from sweet basil, or both, and contains not less than one-tenth (0.1) per cent. by volume of oil of sweet basil.

19a. SWEET BASIL is the leaves and tops of *Ocimum basilicum* L.

19b. OIL OF SWEET BASIL is the volatile oil obtained from basil.

20. SWEET MARJORAM EXTRACT, MARJORAM EXTRACT, is the flavoring extract prepared from the oil of marjoram, or from marjoram, or both, and contains not less than one (1) per cent. by volume of oil of marjoram.

20a. OIL OF MARJORAM is the volatile oil obtained from marjoram.

21. THYME EXTRACT is the flavoring extract prepared from oil of thyme, or from thyme, or both, and contains not less than two-tenths (0.2) per cent. by volume of oil of thyme.

21a. OIL OF THYME is the volatile oil obtained from thyme.

22. TONKA EXTRACT is the flavoring extract prepared from tonka bean, with or without sugar or glycerin, and contains not less than one-tenth (0.1) per cent. by weight of coumarin extracted from the tonka bean, together with a corresponding proportion of the other soluble matters thereof.

22a. TONKA BEAN is the seed of *Coumarouna odorata* Aublet (*Dipteryx odorata* (Aubl.) Willd.).

23. VANILLA EXTRACT is the flavoring extract prepared from vanilla bean, with or without sugar or glycerin, and contains in one hundred (100) cubic centimeters the soluble matters from not less than ten (10) grams of the vanilla bean.

23a. VANILLA BEAN is the dried, cured fruit of *Vanilla planifolia* Andrews.

24. WINTERGREEN EXTRACT is the flavoring extract prepared from oil of wintergreen, and contains not less than three (3) per cent. by volume of oil of wintergreen.

24a. OIL OF WINTERGREEN is the volatile oil distilled from the leaves of the *Gaultheria procumbens* L.

c. Edible Vegetable Oils and Fats.

1. OLIVE OIL is the oil obtained from the sound, mature fruit of the cultivated olive tree (*Olea europaea* L.) and subjected to the usual refining processes; is free from rancidity; has a refractive index (25° C.) not less than one and forty-six hundred and sixty ten-thousandths (1.4660) and not exceeding one and forty-six hundred and eighty ten-thousandths (1.4680); and an iodine number not less than seventy-nine (79) and not exceeding ninety (90).

2. VIRGIN OLIVE OIL is olive oil obtained from the first pressing of carefully selected, hand-picked olives.

3. COTTON-SEED OIL is the oil obtained from the seeds of cotton plants (*Gossypium hirsutum* L., *G. barbadense* L., or *G. herbaceum* L.) and subjected to the usual refining processes; is free from rancidity; has a refractive index (25° C.) not less than one and forty-seven hundred ten-thousandths (1.4700) and not exceeding one and forty-seven hundred and twenty-five ten-thousandths (1.4725); and an iodine number not less than one hundred and four (104) and not exceeding one hundred and ten (110).

4. "WINTER-YELLOW" COTTON-SEED OIL is expressed cotton-seed oil from which a portion of the stearin has been separated by chilling and pressure, and has an iodine number not less than one hundred and ten (110) and not exceeding one hundred and sixteen (116).

5. PEANUT OIL, ARACHIS OIL, EARTHNUT OIL, is the oil obtained from the peanut (*Arachis hypogaea* L.) and subjected to the usual refining processes; is free from rancidity; has a refractive index (25° C.) not less than one and forty-six hundred and ninety ten-thousandths (1.4690) and not exceeding one and forty-seven hundred and seven ten-thousandths (1.4707); and an iodine number not less than eighty-seven (87) and not exceeding one hundred (100).

6. "COLD-DRAWN" PEANUT OIL is peanut oil obtained by pressure with out heating.

7. SESAME OIL, GINGILI OIL, TEEL OIL, is the oil obtained from the seeds of the sesame plants (*Sesamum orientale* L. and *S. radiatum* Schum. and Thonn.) and subjected to the usual refining processes; is free from rancidity; has a refractive index (25° C.) not less than one and forty-seven hundred and four ten-thousandths (1.4704) and not exceeding one and forty-seven hundred and seventeen ten-thousandths (1.4717); and an iodine number not less than one hundred and three (103) and not exceeding one hundred and twelve (112).

8. "COLD-DRAWN" SESAME OIL is sesame oil obtained by pressure with out heating.

9. POPPY-SEED OIL is the oil obtained from the seed of the poppy (*Papaver somniferum* L.) subjected to the usual refining processes and free from rancidity.

10. WHITE POPPY-SEED OIL, "COLD-DRAWN" POPPY-SEED OIL, is poppy-seed oil of the first pressing without heating.

11. **COCONUT OIL** is the oil obtained from the kernels of the coconut (*Cocos nucifera* L.) and subjected to the usual refining processes and free from rancidity.

12. **COCHIN OIL** is coconut oil prepared in Cochin (Malabar).

13. **CEYLON OIL** is coconut oil prepared in Ceylon.

14. **COPRA OIL** is coconut oil prepared from copra, the dried kernels of the coconut.

15. **RAPE-SEED OIL, COLZA OIL**, is the oil obtained from the seeds of the rape plant (*Brassica napus* L.) and subjected to the usual refining processes and free from rancidity.

16. **"COLD-DRAWN" RAPE-SEED OIL**, is rape-seed oil obtained by the first pressing without heating.

17. **SUNFLOWER OIL** is the oil obtained from the seeds of the sunflower (*Helianthus annuus* L.) and subjected to the usual refining processes and free from rancidity.

18. **"COLD-DRAWN" SUNFLOWER OIL** is sunflower oil obtained by the first pressing without heating.

19. **MAIZE OIL, CORN OIL**, is the oil obtained from the germ of the maize (*Zea mays* L.) and subjected to the usual refining processes and free from rancidity.

20. **COCOA BUTTER, CACAO BUTTER**, is the fat obtained from roasted, sound cocoa beans, and subjected to the usual refining processes; is free from rancidity; has a refractive index (40° C.) not less than one and forty-five hundred and sixty-six ten-thousandths (1.4566) and not exceeding one and forty-five hundred and ninety-eight ten-thousandths (1.4598), an iodine number not less than thirty-three (33) and not exceeding thirty-eight (38); and a melting point not lower than 30° C. nor higher than 35° C.

21. **COTTON-SEED OIL STEARIN** is the solid product made by chilling cotton-seed oil and separating the solid portion by filtration, with or without pressure, and having an iodine number not less than eighty-five (85) and not more than one hundred (100).

E. TEA, COFFEE, AND COCOA PRODUCTS.

a. Tea.

1. **TEA** is the leaves and leaf buds of different species of *Thea*, prepared by the usual trade processes of fermenting, drying, and firing; meets the provisions of the act of Congress approved March 2, 1897, and the regulations made in conformity therewith (Treasury Department Circular 16, February 6, 1905); conforms in variety and place of production to the name it bears; and contains not less than four (4) nor more than seven (7) per cent. of ash.

b. Coffee.

1. **COFFEE** is the seed of *Coffea arabica* L. or *Coffea liberica* Bull., freed from all but a small portion of its spermoderm, and conforms in variety and place of production to the name it bears.

2. **ROASTED COFFEE** is coffee which by the action of heat has become brown and developed its characteristic aroma, and contains not less than ten (10) per cent. of fat and not less than three (3) per cent. of ash.

c. Cocoa and Cocoa Products.

1. **COCOA BEANS** are the seeds of the cacao tree, *Theobroma cacao* L.
2. **COCOA NIBS CRACKED COCOA**, is the roasted, broken cocoa bean freed from its shell or husk.
3. **CHOCOLATE, PLAIN CHOCOLATE, BITTER CHOCOLATE, CHOCOLATE LIQUOR, BITTER CHOCOLATE COATINGS**, is the solid or plastic mass obtained by grinding cocoa nibs without the removal of fat or other constituents except the germ, and contains not more than three (3) per cent. of ash insoluble in water, three and fifty hundredths (3.50) per cent. of crude fiber, and nine (9) per cent. of starch, and not less than forty-five (45) per cent. of cocoa fat.
4. **SWEET CHOCOLATE, SWEET CHOCOLATE COATINGS**, is chocolate mixed with sugar (sucrose), with or without the addition of cocoa butter, spices, or other flavoring materials, and contains in the sugar and fat-free residue no higher percentage of either ash, fiber, or starch than is found in the sugar and fat-free residue of chocolate.
5. **COCOA, POWDERED COCOA**, is cocoa nibs, with or without the germ, deprived of a portion of its fat and finely pulverized, and contains percentages of ash, crude fiber, and starch corresponding to those in chocolate after correction for fat removed.
6. **SWEET COCOA, SWEETENED COCOA**, is cocoa mixed with sugar (sucrose), and contains not more than sixty (60) per cent. of sugar (sucrose), and in the sugar and fat-free residue no higher percentage of either ash, crude fiber, or starch than is found in the sugar and fat-free residue of chocolate.

F. BEVERAGES.

Fermented Fruit Juices.

1. **WINE** is the product made by the normal alcoholic fermentation of the juice of sound, ripe grapes, and the usual cellar treatment, and contains not less than seven (7) nor more than sixteen (16) per cent. of alcohol, by volume, and, in one hundred (100) cubic centimeters (20° C.), not more than one-tenth (0.1) gram of sodium chlorid nor more than two-tenths (0.2) gram of potassium sulphate; and for red wine not more than fourteen hundredths (0.14) gram, and for white wine not more than twelve hundredths (0.12) gram of volatile acids produced by fermentation and calculated as acetic acid. Red wine is wine containing the red coloring matter of the skins of grapes. White wine is wine made from white grapes or the expressed fresh juice of other grapes.
2. **DRY WINE** is wine in which the fermentation of the sugars is practically complete and which contains, in one hundred (100) cubic centimeters (20° C.), less than one (1) gram of sugars and for dry red wine not less than sixteen hundredths (0.16) gram of grape ash and not less than one and six-tenths (1.6) grams of sugar-free grape solids, and for dry white wine not less than thirteen hundredths (0.13) gram of grape ash and not less than one and four-tenths (1.4) grams of sugar-free grape solids.
3. **FORTIFIED DRY WINE** is dry wine to which brandy has been added but which conforms in all other particulars to the standard of dry wine.
4. **SWEET WINE** is wine in which the alcoholic fermentation has been arrested and which contains in one hundred (100) cubic centimeters (20°

C.), not less than one (1) gram of sugars, and for sweet red wine not less than sixteen hundredths (0.16) gram of grape ash, and for sweet white wine not less than thirteen hundredths (0.13) gram of grape ash.

5. **FORTIFIED SWEET WINE** is sweet wine to which wine spirits have been added. By act of Congress, "sweet wine" used for making fortified sweet wine and "wine spirits" used for such fortification are defined as follows (sec. 43, Act of October 1, 1890, 26 Stat., 567, as amended by section 68, Act of August 27, 1894, 28 Stat., 509, and further amended by Act of Congress approved June 7, 1906): "That the wine spirits mentioned in section 42 of this act is the product resulting from the distillation of fermented grape juice to which water may have been added prior to, during, or after fermentation, for the sole purpose of facilitating the fermentation and economical distillation thereof, and shall be held to include the products from grapes or their residues, commonly known as grape brandy; and the pure sweet wine, which may be fortified free of tax, as provided in said section, is fermented grape juice only, and shall contain no other substance whatever introduced before, at the time of, or after fermentation, except as herein expressly provided; and such sweet wine shall contain not less than four per centum of saccharine matter, which saccharine strength may be determined by testing with Balling's saccharometer or must scale, such sweet wine, after the evaporation of the spirits contained therein, and restoring the sample tested to original volume by addition of water: Provided, That the addition of pure boiled or condensed grape must or pure crystallized cane or beet sugar or pure anhydrous sugar to the pure grape juice aforesaid, or the fermented product of such grape juice prior to the fortification provided by this act for the sole purpose of perfecting sweet wine according to commercial standard, or the addition of water in such quantities only as may be necessary in the mechanical operation of grape conveyers, crushers, and pipes leading to fermenting tanks, shall not be excluded by the definition of pure sweet wine aforesaid: Provided, however, That the cane or beet sugar, or pure anhydrous sugar, or water, so used shall not in either case be in excess of ten (10) per centum of the weight of the wine to be fortified under this act: And provided further, That the addition of water herein authorized shall be under such regulations and limitations as the Commissioner of Internal Revenue, with the approval of the Secretary of the Treasury, may from time to time prescribe; but in no case shall such wines to which water has been added be eligible for fortification under the provisions of this act where the same, after fermentation and before fortification, have an alcoholic strength of less than five per centum of their volume."

6. **SPARKLING WINE** is wine in which the after part of the fermentation is completed in the bottle, the sediment being disgorged and its place supplied by wine or sugar liquor, and which contains, in one hundred (100) cubic centimeters (20° C.), not less than twelve hundredths (0.12) gram of grape ash.

7. **MODIFIED WINE, AMELIORATED WINE, CORRECTED WINE**, is the product made by the alcoholic fermentation, with the usual cellar treatment, of a mixture of the juice of sound, ripe grapes with sugar (sucrose), or a sirup containing not less than sixty-five (65) per cent. of sugar (sucrose), ..

and in quantity not more than enough to raise the alcoholic strength after fermentation, to eleven (11) per cent. by volume.

8. RAISIN WINE, is the product made by the alcoholic fermentation of an infusion of dried or evaporated grapes, or of a mixture of such infusion or of raisins with grape juice.

G. VINEGAR.

1. VINEGAR, CIDER VINEGAR, APPLE VINEGAR, is the product made by the alcoholic and subsequent acetous fermentations of the juice of apples; is laevo-rotatory, and contains not less than four (4) grams of acetic acid, not less than one and six-tenths (1.6) grams of apple solids, of which not more than fifty (50) per cent. are reducing sugars, and not less than twenty-five hundredths (0.25) gram of apple ash in one hundred (100) cubic centimeters (20° C.); and the water-soluble ash from one hundred (100) cubic centimeters (20° C.) of the vinegar contains not less than ten (10) milligrams of phosphoric acid (P_2O_5), and requires not less than thirty (30) cubic centimeters of decinormal acid to neutralize its alkalinity.

2. WINE VINEGAR, GRAPE VINEGAR, is the product made by the alcoholic and subsequent acetous fermentations of the juice of grapes and contains, in one hundred (100) cubic centimeters (20° C.), not less than four (4.0) grams of acetic acid, not less than one (1.0) gram of grape solids and not less than thirteen hundredths (0.13) gram of grape ash.

3. MALT VINEGAR is the product made by the alcoholic and subsequent acetous fermentations, without distillation, of an infusion of barley malt or cereals whose starch has been converted by malt, is dextro-rotatory and contains, in one hundred (100) cubic centimeters (20° C.), not less than four (4) grams of acetic acid, not less than two (2) grams of solids and not less than two-tenths (0.2) gram of ash; and the water-soluble ash from one hundred (100) cubic centimeters (20° C.) of the vinegar contains not less than nine (9) milligrams of phosphoric acid (P_2O_5), and requires not less than four (4) cubic centimeters of decinormal acid to neutralize its alkalinity.

4. SUGAR VINEGAR is the product made by the alcoholic and subsequent acetous fermentations of solutions of sugar, sirup, molasses, or refiners' sirup, and contains, in one hundred (100) cubic centimeters (20° C.) not less than four (4) grams of acetous acid.

5. GLUCOSE VINEGAR is the product made by the alcoholic and subsequent acetous fermentations of solutions of starch sugar or glucose, is dextro-rotatory, and contains, in one hundred (100) cubic centimeter (20° C.), not less than four (4) grams of acetic acid.

6. SPIRIT VINEGAR, DISTILLED VINEGAR, GRAIN VINEGAR, is the product made by the acetous fermentation of dilute distilled alcohol, and contains, in one hundred (100) cubic centimeters (20° C.), not less than four (4) grams of acetic acid.

III. SALT.

1. TABLE SALT, DAIRY SALT, is fine-grained crystalline salt containing on a water-free basis, not more than one and four-tenths (1.4) per cent of calcium sulphate ($CaSO_4$), nor more than five-tenths (0.5) per cent of calcium and magnesium chlorids ($CaCl_2$ and $MgCl_2$), nor more than one-tenth (0.1) per cent. of matters insoluble in water.

RULES FOR THE ENFORCEMENT OF THE PURE FOOD AND DRUG LAW.

RULE 1.

SHORT TITLE OF THE ACT.

The Act entitled an Act forbidding the manufacture, sale or offering for sale of any adulterated or misbranded foods or drugs, defining foods and drugs, stating wherein adulteration and misbranding of foods and drugs consist, and defining the duties of the State Board of Health in relation to foods and drugs, their inspection, purity and misbranding, regulating the slaughter of animals and their preparation for food, providing an appropriation for enforcement, providing for the appointment of a state food and drug commissioner, declaring penalties for the violation of the laws, rules and ordinances concerning foods and drugs, repealing acts in conflict therewith, and declaring an emergency, signed March 4, 1907, shall be known and referred to as "The Indiana Pure Food and Drug Law."

RULE 2.

ENFORCEMENT.

The enforcement of the law is made the duty of the State Board of Health through its Chemist, who is the State Food and Drug Commissioner. The state, county and town health officers are food and drug inspectors, together with the deputy state health officers, subordinate to the State Board of Health, and are authorized agents of the board for the enforcement of the law.

RULE 3.

DUTY OF INSPECTORS.

It shall be the duty of the deputy state health officers and food and drug inspectors:

1. To collect samples of foods and drugs for examination and analysis;
2. To inspect dairies, creameries, cheese factories and other places where milk products are made and prepared;
3. To inspect stockyards, abattoirs and slaughter houses where animals are kept for slaughter, slaughtered and prepared for market;
4. To inspect canning factories, confectioners' factories, pickling factories, syrup refineries, bottling works, breweries, drug manufactories and other places where foods and drugs are made and prepared.
5. To inspect grocery stores, meat markets, fish markets, drug stores and all other places dealing in or selling food and drugs;
6. To inspect bakeries, bakeshops and other places where bread, cake, pastries, confections and similar products are prepared for sale;
7. To inspect restaurants, hotels and other public places where food is prepared and sold;
8. To confer with health and sanitary officers in regard to the proper enforcement of the Pure Food and Drug Laws;

9. To assist local officials in the prosecution of violations of the Food and Drug Laws.

The state food and drug inspectors shall make daily reports to the State Food and Drug Commissioner, and shall receive all orders from him pertaining to food and drugs.

It shall be the further duty of the deputy state health officers and food and drug inspectors to inspect the conditions of each county, and city and town health office and to make correct reports to the secretary of the board each day of any conditions found to exist.

Inspectors shall conduct their examinations quietly and in such a manner that no unnecessary antagonism will be aroused against their work. They will remember always that it is the policy of the Board of Health to co-operate with manufacturers, wholesalers and retailers in securing pure goods.

COLLECTION OF SAMPLES.

Inspectors shall make collections of food and drug samples in the following manner:

Samples of food and drugs shall be purchased and paid for, and whenever possible, a receipt shall be obtained from the dealer, and numbered to correspond with the number placed on the sample.

When possible all samples of food and drugs shall be original packages, and when impossible, as in the case of cheese, milk, butter, bulk spices, vinegar, bulk chemicals, extracts, syrups, tinctures, etc., samples shall be placed in suitable packages or containers and properly marked and labeled.

The quantity of bulk goods shall not be less than six ounces, and all liquids not less than one pint, except where the character of the sample is such that only a small quantity is required for examination and analysis.

In collecting samples of foods and drugs, duplicate, sealed samples will be left with the dealer if he so requests.

Samples of liquids, bulk goods, such as vinegar, milk, molasses, flour, sugar, etc., shall be securely sealed before they leave the hands of the collector, and preferably in the presence of the dealer.

At the time of the collection the sample shall be given a serial number known as the "Inspector's collection number." This serial number will be noted in the inspector's blanks together with the name of manufacturer, retailer, town, county, brand, date of collection and such other information as may be necessary to identify the sample. This data shall be kept in duplicate and each day copies of the descriptions of all samples collected shall be forwarded to the State Food and Drug Commissioner. The original copy will remain in the possession of the inspector to be used by him in conducting prosecutions.

Samples shall be brought to the laboratory and placed by the inspector in a case suitably provided with lock and two keys, one key to be retained by the inspector, the other is deposited with the State Food and Drug Commissioner.

When samples can not be brought to the laboratory by the inspector, they may be shipped by express to the State Food and Drug Commissioner as often as may be necessary. The box containing the samples shall be

sealed and receipts for the same from the express companies retained by the inspector.

Inspectors, while traveling in parts of the state from which they are unable to return to their home at night, will be allowed reasonable hotel bills.

Inspectors will be allowed car fare to the extent of the smallest fare between points, and necessary livery and express bills.

Inspectors shall keep an accurate account of their expenses and shall return vouchers or receipts for same at the end of the week, and no expense incurred by inspectors will be allowed unless accompanied by properly-signed vouchers or receipts. Vouchers or receipts will not be required for railroad fare.

RULE 4.

METHODS OF ANALYSIS.

Unless otherwise directed by the State Food and Drug Commissioner, the methods of analysis employed shall be those prescribed by the Association of Official Agricultural Chemists and the U. S. Pharmacopœia.

RULE 5.

PROCEDURE IN CASE OF VIOLATION OF THE LAW.

Whenever upon analysis or examination it appears that samples of food or drugs are adulterated in violation of the Pure Food and Drug Law, the State Food and Drug Commissioner or other authorized officers of the State Board of Health, shall furnish evidence to district prosecutors, who will proceed according to the commands of the act as set forth in section 11 of the law.

Whenever upon inspection a dairy, abattoir, slaughterhouse, bakery or other place of manufacture of food or drug products is found to be uncleanly or otherwise conducted in an unwholesome or unsanitary manner, the inspector shall at once report such findings to the state health officer and said inspectors shall direct the manufacturers, owners or operators of such dairies, abattoirs, slaughterhouses, bakeries, etc., to make within a specified time the changes necessary to comply with the statutes and the rules of the State Board of Health concerning the same.

RULE 6.

HEARINGS.

Whenever the owner, proprietor or agent of any firm or corporation engaged in the manufacture and sale of food or drug products shall have been notified by an inspector of the State Board of Health that his place of business is not conducted in accordance with the law and the rules of the State Board of Health, he may within five days from the date of said notice, make a written plea to the secretary of the State Board of Health, asking that a hearing be given him at the office of the state board, and at the time appointed he may appear to give reasons why the conditions noted by the inspector existed, and why he should not comply

with the order of the state inspector or be prosecuted; the said hearing to be before the secretary of the State Board and the State Food and Drug Commissioner.

RULE 7.

PUBLICATION.

The State Food and Drug Commissioner shall from time to time publish in the monthly Bulletin of the Indiana State Board of Health or in such other manner as may be approved by the secretary of the board, reports of the operation of the food and drug law. Such reports may include the results of analyses of samples collected by the food and drug inspectors, statements as to the condition of dairies, abattoirs, slaughterhouses, bakeries, drug stores and other food and drug manufacturing establishments, records of legal proceedings instituted against violators of the food and drug law, and such other matters as may be of value and interest to dealers in food products and to the public.

RULE 8.

GUARANTY.

The provisions of section 6 of the Pure Food and Drug Law shall be observed by inspectors whenever the goods purchased or examined are in an original, unbroken package. The term "Original, unbroken package" as used in this act, is the original package, carton, case, can, box, barrel, bottle, phial, or other receptacle put up by the manufacturer, to which the label is attached, or which may be suitable for the attachment of a label making one complete package of the food or drug article. The original package contemplated includes both the wholesale and the retail package.

ADULTERATION.

RULE 9.

SUBSTANCES MIXED WITH FOODS.

No substance may be mixed with a food product that will lower or reduce its strength. Substances properly used in the preparation of food products for the purpose of clarifying or refining and eliminated in a further process of manufacture, are not included under this provision. The sale of spices containing inert and foreign materials such as cereals, ground olive stones, cocoanut shells, etc., is prohibited.

RULE 10.

COLORING, POWDERING, COATING AND STAINING.

1. Only harmless colors may be used in food products, and then only when the use of such colors does not make the article appear better or of greater value than it really is.

2. The reduction of a substance to a powder to conceal inferiority in character is prohibited.

3. The term "powdered" means the application of any powdered substance to the exterior portion of articles of food, or the reduction of a substance to a powder.

4. The term "coated" means the application of any substance to the exterior portion of a food product.

5. The term "stained" includes any change produced by the addition of any substance to the exterior portion of foods which in any way alters their natural tint.

RULE 11.

NATURAL, POISONOUS OR DELETERIOUS INGREDIENTS.

Any food product which contains naturally a poisonous or deleterious ingredient does not come within the provisions of the Pure Food and Drug Law, except when the presence of such ingredient is due to filth, putrescence or decomposition.

RULE 12.

PRESERVATIVES.

The presence of any added antiseptic or preservative substance, except common table salt, saltpeter, cane sugar, vinegar, spices, or, in smoked food, the natural product of the smoking process, constitutes an adulteration. The use of salicylic acid, benzoic acid, boric acid, hydrofluoric acid, sulphurous acid, and compounds or salts of these acids; formaldehyde or formalin and the various mixtures known to the trade as "freezine," "iceine," "formol," "preservalines" of various kinds, saccharine, betanaphthol or any other preservatives or their compounds injurious to health is prohibited: Provided, however, That until further notice benzoate of soda may be employed in quantities not to exceed one-tenth of 1 per cent. for the preservation of tomato catsup. A statement to the effect that benzoate of soda is used must be plainly printed upon the principal label.

RULE 13.

DYES AND COLORING MATTER.

The use of dyes and coloring matter in food products is prohibited wherever such dye or color is used for the purpose of making the product appear better or of greater value than it really is, or of counterfeiting the appearance of natural food products. This regulation does not prohibit the use of harmless dye colors in confectionery, icings, dessert preparations, etc., nor of color used in butter and cheese manufacture. Dyes and coloring matter shall not be used in preparation of meat products, such as sausage, minced meats, etc., where the color is incorporated with the product in the process of manufacture. The practice of dipping sausage for the purpose of imparting a color to the casing only, is not prohibited.

RULE 14.

CHARACTER OF RAW MATERIAL.

The raw material used in the manufacture of food and drug products shall be sound, wholesome and free from decomposition. The meat products shall be sound, wholesome and fit for human food, and shall be

made from sound and healthy animals slaughtered and prepared in accordance with section 4 of the Pure Food and Drug Law. Carcasses of animals too immature to produce wholesome meat, of unborn and stillborn animals, carcasses of pigs, kids and lambs under three weeks of age, and of calves less than four weeks of age, shall be condemned as unsuitable for food. Carcasses of animals in advanced stages of pregnancy, also carcasses of animals which have within 10 days given birth to young, and in which there is no evidence of septic poisoning, may be rendered into lard or tallow if so desired, otherwise they shall be condemned as unsuitable for food. All animals that die in abattoirs, pens and those in a dying condition before slaughtering shall not be used as food. In enforcing the provisions of the Pure Food Law in relation to meat and meat products, inspectors will follow the regulations laid down for the instruction of inspectors of the Bureau of Animal Industry of the U. S. Department of Agriculture.

MISBRANDING.

RULE 15.

LABELING.

(a) The term "label" applies to any printed, pictorial, or other matter upon or attached to any package of a food or drug product, or any container thereof.

(b) The principal label shall consist, first, of all words which the food and drug act, June 30, 1906, specifically requires, to wit, the name of the substance or product; the name of place of manufacture in the case of food compounds or mixtures; words which show that the articles are compounds, mixtures, or blends; the words "compound," "mixture," or "blend"; or words designating the substances or their derivatives and proportions required to be named in the case of drugs and foods. All these required words shall appear upon the principal label with no intervening descriptive or explanatory reading matter. Second, if the name of the manufacturer and place of manufacture are given, they shall also appear upon the principal label. Third, elsewhere upon the principal label other matter may appear in the discretion of the manufacturer.

(c) The principal label on foods or drugs for domestic commerce shall be printed in English (except as provided in Regulation 19), with or without the foreign label in the language of the country where the food or drug product is produced or manufactured. The size of type shall not be smaller than 8-point (brevier) caps: Provided, That in case the size of the package will not permit the use of 8-point cap type the size of the type may be reduced proportionately.

(d) The form, character, and appearance of the labels, except as provided above, are left to the judgment of the manufacturer.

(e) Descriptive matter upon the label shall be free from any statement, design, or device regarding the article or the ingredients or substances contained therein, or quality thereof, or place of origin, which is false or misleading in any particular.

(f) An article containing more than one food product or active medicinal agent is misbranded if named after a single constituent.

In the case of drugs the nomenclature employed by the United States Pharmacopoeia and the National Formulary shall obtain.

(g) The term "design" or "device" applies to pictorial matter of every description, and to abbreviations, characters, or signs for weights, measures, or names of substances.

(h) The use of any false or misleading statement, design or device shall not be justified by any statement given as the opinion of an expert or other person, appearing on any part of the label, nor by any descriptive matter explaining the use of the false or misleading statement, design, or device.

SANITARY CONDITIONS.

RULE 16.

DAIRIES.

Section 3 of the Pure Food and Drug Law provides that milk shall not be sold, exchanged or delivered that is adulterated by the addition of water, color, preservatives or other foreign substances. Milk from which the cream or a part thereof has been removed; or milk kept and handled under conditions which are not sanitary shall be considered to be adulterated. Inspectors shall note the following conditions as defining cleanly and sanitary conditions.

THE BUILDINGS.

Buildings used for cowstables, dairies and milk rooms shall be well ventilated, properly lighted and provided with floors of plank, cement or other material which can be thoroughly washed and cleaned. The stables and milk room shall be kept reasonably well painted or whitewashed. The premises must be at all times clean and free from rubbish, standing water and any offensive material. Horses, hogs and poultry shall not be kept in cowstables.

THE EMPLOYEES.

No person suffering with any contagious or infectious disease or who has been exposed shall be employed about the dairy, or in milking or handling the milk or milk utensils. Employees handling milk and milk utensils must be cleanly in their habits, and the garments worn by such employees shall be kept in a clean condition.

THE MILK.

Milk shall not be drawn from the udder until the same has been properly cleaned by brushing or washing. The milk shall not be kept for sale or stored in any room used for sleeping or domestic purposes. No milk bottle or other container (when taken from the consumer's residence) shall be refilled until it has been returned to the dairy or milk depot and thoroughly cleaned and sterilized. Milk shall be taken from the stable as soon as drawn, cooled immediately, and kept thereafter until delivered at a temperature not exceeding 60 degrees Fahr.

BAKERIES.

(1) The floors, side-walls, ceilings, fixtures, furniture, and utensils of every establishment or place where food products are manufactured or stored, shall at all times be kept in a clean, healthful and sanitary condition.

The side-walls and ceilings of every bake room or confectionery shall be well plastered, wainscoted or celled with metal or lumber. Plastered walls and ceilings shall be oil painted or kept well lime washed and all interior woodwork in every bakery or confectionery shall be kept well oiled or painted with oil paint and kept washed clean with soap and water. And every building, room, basement, or cellar occupied or used for the manufacture of any food products shall have, if deemed necessary by the State Health Officer, an impermeable floor made of cement or tile laid in cement.

(2) The sleeping place or places for the persons employed in a bake-shop shall be separate and apart from the bake room; and no persons shall be allowed to sleep in a bake room or place where flour or meal or the products thereof are stored. No domestic animal except cats shall be permitted to remain in a bake room or place used for the storage of flour or meal food products.

(3) No employer shall knowingly require, permit or suffer any person to work in a bakery or confectionery who is affected with consumption of the lungs, or with scrofula, or with any venereal disease or with any communicable skin disease. Cuspidors shall be provided by the owner or operator for each workroom of every bakery or confectionery, and no employe or other person shall expectorate on the floor or side-walls of any bakery or confectionery or place where the manufacture of any food products is conducted. Plain notices shall be posted in every place where food products of any kind are produced, forbidding all persons expectorating on the floors of such establishment.

(4) The door and window openings of every food-producing establishment during fly season shall be fitted with self-closing wire screen doors and top outward-tipping wire window screens.

(5) Every bakery and confectionery shall be provided with wash-room and water-closet or closets but separate and apart from the bake room or rooms where the manufacture of any food product is conducted.

ABATTOIRS AND SLAUGHTERHOUSES.

Inspectors of abattoirs and slaughterhouses shall determine unsanitary conditions as provided and defined in Section 4 of the Pure Food and Drug Law.

GROCERIES AND MEAT MARKETS.

Inspectors of groceries and meat markets shall be guided by the following conditions: Sanitary conditions shall exist in groceries and meat markets: When the floors are clean and free from litter and accumulated dirt; when the side walls and ceilings are free from cobwebs, dust and accumulated dirt; when the counters, shelves, drawers and bins are clean and free from foreign odors; when the refrigerators, iceboxes, meat boxes, etc., are well ventilated and free from foul and unpleasant

odors, fungus growths, mold and slime. Meat, fruit, vegetables, bread and pastry shall not be wrapped in newspapers or other unclean papers. Doors and windows shall be provided with efficient screens during the season for flies, and meats exposed for sale shall be protected from flies and dust. Backshops and cellars must be kept clean and well ventilated and lighted. Persons suffering from cancer or any contagious or infectious disease or who have been exposed to a quarantinable disease, shall not be employed in groceries, dairies, meat markets or other places where foods and drugs are offered for sale. Cats, dogs or other animals shall not be allowed on shelves or counters or other places where food products are kept or stored. Meats shall not be exposed for sale outside the places of business unless protected from dust and insects by suitable covering.

DRUG STORES.

Inspectors of drug stores shall be guided by the following conditions: Sanitary conditions shall exist in drug stores: When the floors are clean and free from litter and accumulated dirt; when the side walls and ceilings are free from cobwebs, dust and accumulated dirt; when the counters, shelves, drawers and bins are clean; when refrigerators and soda fountains are free from foul and unpleasant odors, mold and slime. Glassware, spoons, etc., used at soda fountains shall be thoroughly washed and rinsed in clean water. Soda fountains, sirup cans and bottles shall be thoroughly washed before refilling. Draft tubes shall be kept clean. Drainage boards, sinks, shelves, etc., on which glasses are kept shall be kept clean. Graduates, mortars and other apparatus and glassware used in preparing drugs shall be clean. Prescription bottles must be washed and cleaned before filling. Powder papers shall be made of clean paper. Backshops and basements must be kept clean, well ventilated and lighted, or if used for storerooms only, must be dry, free from litter and suitable for the storage of medicinal preparations. Persons suffering from cancer or any contagious or infectious disease or who have been exposed to a quarantinable disease shall not be employed in a drug store.

HOTELS AND RESTAURANTS.

Inspectors of hotels and restaurants shall be governed by the following conditions:

Sanitary conditions shall exist in hotel and restaurant kitchens and dining rooms, ice cream parlors, lunch carts and other places where food is prepared and served, and when the floors are clean and free from litter and accumulated dirt; when the side-walls and ceiling are free from cobwebs and accumulated dirt; when the counters, tables, shelves and sinks, drawers, bins and cabinets are clean; when refrigerators, iceboxes and cold storage rooms are free from foul and unpleasant odors, mold and slime; when the doors and windows are properly screened; when dining rooms and kitchens are well lighted and ventilated. Dishes, tableware and kitchen utensils must be washed and rinsed in clean water after using; food served to customers and then returned to the kitchen or serving room must not again be served; all garbage must be removed daily. Back shops, backyards and cellars must be kept clean and free from rubbish. Cellars, unless properly arranged, well lighted and ventilated, and free

from moisture, must not be used for the storage of prepared foods unless such food is in glass, tin or other air-tight container. Spittoons must not be used in the dining room or other places where food is served. Toilets for employes shall not be located in rooms used for preparing or for storing food. Persons suffering from cancer or any contagious or infectious disease or who have been exposed to a quarantinable disease shall not be employed in any restaurant, hotel or other place where food is served.

Ordered, Ten thousand copies of the above rules ordered printed in pamphlet form.

EMPLOYES AND SALARIES.

The annual salaries of certain employes were ordered as follows, to begin April 1, 1907:

Superintendent of bacteriological laboratory	\$1,800 00
First assistant bacteriologist	1,400 00
Second assistant bacteriologist	720 00
Stenographer	600 00
Steward	600 00
First assistant chemist	1,400 00
Second assistant chemist	900 00
Third assistant chemist	600 00
Stenographer	600 00
Janitor	520 00

FOOD AND DRUG INSPECTORS.

Inspector No. 1, for central district	\$1,200 00
Inspector No. 2, headquarters Peru	1,000 00
Inspector No. 3, headquarters Worthington	1,000 00
Inspector No. 4, headquarters Paoli	1,000 00

The following persons were appointed to positions:

Ivy L. Miller, second assistant chemist.
 Berthold Cohn, inspector No. 1.
 Frank Tucker, inspector No. 2.
 John Owens, inspector No. 3.
 A. W. Bruner, inspector No. 4.

Report of Dr. A. W. Brayton was read and ordered made of record.

REPORT OF DR. A. W. BRAYTON, IN REGARD TO THE CONDITIONS PERTAINING TO SMALLPOX, IN THE MONTHS OF NOVEMBER AND DECEMBER, IN PULASKI AND FULTON COUNTIES, MARCH 1, 1907.

By authorization of Dr. W. N. Wishard, acting President State Board of Health, I visited Pulaski and Fulton Counties, November 28 and 29, 1906, to investigate the smallpox in these two counties. This was made

necessary by a petition from DeLong, Indiana, signed by some forty residents of both Pulaski and Fulton counties, living in the vicinity of Leiters Ford, DeLong and Monterey, stating that there was much smallpox there, and that it was neglected by the health officers of both counties.

I left Indianapolis on the morning of November 28th and spent the afternoon and evening with the health officer of Fulton County, at Rochester, Dr. J. N. Rannells. From him I learned that while there were several cases of smallpox in the northwest corner of Fulton County, there were none in the vicinity of Rochester, and the disease was mainly in the country between Leiters Ford and the county line, and was under the care of the local health officer, Dr. Benjamin F. Overmyer, of Leiters Ford.

The following morning, November 29th, I took the train to Leiters Ford, meeting Dr. Overmyer about nine o'clock, but found only one family known to have the disease in that vicinity. We drove twelve to fifteen miles over the country, finding some eight or ten cases at five different farm houses. In every case the houses were quarantined and sanitary conditions were excellent, and the people were in full sympathy with Dr. Overmyer in his efforts to stamp out the disease. Dr. Overmyer carried vaccine with him and vaccinated wherever he found those that required it.

Dr. Clement L. Slonaker, near Leiters Ford, a graduate of I. M. C. in 1903, was also very efficient in vaccinating and combating the disease. He was thoroughly familiar with smallpox through your teachings and of the method of controlling it, and sent his regards to you.

None of the cases that we found were in any danger, except a mother, who was very thickly broken out, and a newborn babe three days old. I learned since, by correspondence, that the babe had a severe attack of smallpox, but survived.

We drove out to Monterey, in Pulaski County, arriving at noon, and immediately called upon Dr. W. E. Kelsey, aged about seventy-five, and his son, Arthur James Kelsey, the only practicing physicians in Monterey. They admitted that there were one or two cases that they knew of in the town. Dr. A. J. Kelsey, the son, stated that he had made some sixty vaccinations and that none of them had taken. His father was in doubt as to its being true smallpox, regarding it as a hybrid between chickenpox and smallpox proper. He talked fluently about the hybridization of disease, supporting it by his old army surgeon notions of the modification of typhoid by malaria, and the acceptance of that type of a disease known as typho-malaria fever.

After dinner we visited the town health officer, Dr. P. L. Hoot, who is not practicing at the present time, and who is a son-in-law of Dr. Kelsey, Sr. He thought there might be several recovered cases in the village, and had heard of one case that was recently broken out. Then, in company with Dr. Hoot, Dr. Kelsey and Dr. Overmyer, I made a canvass of the town. In a barber shop I discovered two cases that were recovering, with marks and scabs still on them. School was not in session, but I saw two boys on the street who had suffered from the prevalent disease. I learned from them that no attention was paid to it in the school, and that

as soon as they got over the fever and premonitory symptoms they went on to school just as they would had it been chickenpox.

We visited several houses—eight or ten—where it was reported that there was or had been some eruptive disease, and found ten or twelve cases in different mild stages of the disease. The general feeling was that of indifference, engendered by the statements of the physicians that it was not at all true smallpox, and that if it were they might as well have this disease as to undergo the effect of vaccination. Dr. Kelsey, Sr., in a more communicative mood in the afternoon, told me that he presumed there had been three or four hundred cases in the village and surrounding country. This may have been an exaggeration.

I should have stated earlier that from Rochester, the night before, I had communicated with the county health officer of Pulaski County, Dr. John J. Thomas, who stated that there were a few cases in Winamac, but that he did not know personally of any in Monterey, as they had not been reported to him. It was impossible for me to get to Monterey in time to go over the town with Dr. Overmyer.

I urged upon Dr. Kelsey—who with the son-in-law are the parties who should have prevented the wide spread of the disease—the necessity of getting good virus and having immediate general vaccination at the expense of the town, and told the health officer that wherever he heard of a suspected case he should immediately order one of the physicians to investigate and report the facts to the county health officer.

Inasmuch as the holidays were approaching, and in that region there is a good deal of visiting back and forth from town to town and even inter-state visitation, I attempted to impress upon them the necessity of keeping their people at home, as a case had already gone to Lafayette from Monterey, who had developed the disease while working in a laundry there. I also threatened the town with quarantine, telling them that if we did not hear of immediate efforts to suppress the disease, you would take steps to prevent any egress from the town and might order the mail fumigated. I do not think that my threats made much impression upon them. They all seemed content to take their chances and wallow in the disease.

Smallpox first came to that region in March, from Fort Wayne, and had been transmitted from case to case in the country and Monterey from that time. I urged upon Dr. Overmyer the importance of keeping in touch with the town of Monterey and keep me informed as to the conditions. I received a letter from him a month later, stating that he believed it had improved, and that there had been no further outbreak in Fulton County.

I returned to Rochester at 5 o'clock in the afternoon, and talked with Dr. Thomas by long distance 'phone, acquainting him with what I had found and urging him to go at once to Monterey to take proper measures to put an end to the smallpox. I received a letter from him stating that he made such a visit and admitting that he found the conditions much as I had described. I enclose his letter. I also enclose the petition from DeLong asking for the aid of the State Board of Health.

In all the visits I have made at your request to the different parts

of Indiana, I never found any locality, except possibly Clay City, where there was such absolute indifference to the disease and to the rules of the State Board of Health. No citizen was sufficiently interested to prosecute the doctors for not reporting. Dr. Hoot is secretary of the town board, and by virtue of his office, acts also as secretary of the health board, the town and health board being the same.

I visited the newspaper office and saw the editor, and he assured me that the paper had used its influence to assist the State Board of Health, publishing matter sent them and urging the people to be vaccinated. Of course, it was difficult for Dr. Thomas at Winamac to reach and control such a condition, but I think that more frequent visitations and more determination on his part would have brought the physicians and town board of Monterey into line with the rules of the health board.

I visited several physicians at Rochester, and found everything all right there. Dr. Rannells is an unusually efficient and systematic health officer. They have a non-state college at Rochester, which has twice been jeopardized by the presence of smallpox in Fulton County and in Rochester, and as they are all much interested in the college and town, they are very bitter against the people of Monterey for not making an effort to destroy the disease. They do not care for the trade of these people, and are constantly urging them to stay on their own side of the county line. Dr. Rannells said that two or three cases of smallpox in Rochester would upset the school and derange the town and he is determined not to have it occur.

REPORT OF DR. A. W. BRAYTON UPON THE CONDITION OF SMALLPOX IN PERU, WITH SPECIAL REFERENCE TO THE ARREST AND TRIAL AND CONVICTION OF DR. JACOB O. MALSBURY FOR NOT REPORTING SMALLPOX TO THE CITY HEALTH OFFICER, MARCH 12, 1907.

On December 2, 1906, I went to Peru, Indiana, by authority of the State Board of Health, to determine the nature of a case of eruptive disease, which proved to be smallpox. The details are as follows:

The patient, a young man of twenty-five years, had visited the office of Dr. Jacob O. Malsbury, with what proved to be prodromal symptoms of smallpox, a week previous. Dr. Malsbury prescribed for him, and two days later was called to the young man's boarding house and prescribed for him again, and also the day following. On the fifth day the patient appeared at Dr. Malsbury's office about 2 o'clock in the afternoon, and the patient related to me that Dr. Malsbury said that this was what some of the physicians of the city were calling smallpox, and that he had better go to see one of the health officers. The man walked about the streets of the town during the afternoon, took supper at his boarding house, and in the evening about 8 o'clock called upon the health officer, Dr. L. O. Malsbury, a brother of J. O. Malsbury, who decided the case to be smallpox. Dr. J. O. Malsbury did not report the case to the health officer.

Inasmuch as Dr. J. O. Malsbury had been carding the papers against vaccination, saying that if this were smallpox, it was no worse than vaccination, etc., Health Officer Malsbury applied for assistance from the

State Board, as he was determined to prosecute Dr. J. O. Malsbury and have him arrested and fined.

On visiting the boarding house with Health Officer Malsbury, we found the man well broken out with smallpox. Several of the boarders had escaped. The householder was intoxicated and vicious, but the smallpox warning was nailed upon the house and the unvaccinated inmates were vaccinated.

I saw several of the leading physicians, Drs. Bloomfield, Helm, Griswold, etc., who were very insistent on having Dr. J. O. Malsbury punished, as his actions and newspaper notes made it difficult to suppress the smallpox in Peru, which was allowed to have a wide spread because of the failure of Dr. Armstrong to report cases said to be smallpox to the Health Board. You will recall that Dr. Armstrong was fined \$10.00 and costs.

I visited several houses with Health Officer Malsbury, and found the smallpox under very good control. I went before the mayor of Peru and made a statement to him of the action of Dr. J. O. Malsbury, and urged his immediate arrest and trial, and saw that a police officer swore out a warrant to be served the next day. The trial was postponed until February 8, 1907.

In the meantime I was called to Peru to meet the county commissioners and urge upon them the importance of continuing Dr. J. B. Higgins as county health officer, at the usual salary of \$400, although a homeopath who was opposing vaccination—believing that the swallowing of the vaccine would do as well as proper vaccination—had offered to be county health officer at \$100 a year. I advised with the commissioners for three-quarters of an hour and answered all their questions, and had the assurance of two of them that they would vote in favor of Dr. Higgins, and did not wish to have a health officer who did not believe in vaccination at any price. The result was that Dr. Higgins was elected as county health officer at the former salary.

On the same day, I again urged upon the mayor the importance of bringing Dr. J. O. Malsbury to trial, which was done, with the result that he was fined \$10.00 and costs, after a trial that lasted all day, in a justice's court, and was attended by a throng of citizens. The arrest and fining of such an ignoramus as Dr. Armstrong, and of so intelligent a quack as Dr. J. O. Malsbury, proved the turning point in the control of the smallpox in Peru. After these actions, physicians were prompt in reporting all cases of eruptive diseases to the city or county health officers.

I think that Health Officer L. O. Malsbury and Dr. J. B. Higgins are to be commended for the excellent work they are doing in Peru, and in Miami County, respectively, and that the State Board has done no better work than to assist them in the diagnosis and in the two successful prosecutions.

Second Regular Meeting.

REGULAR QUARTERLY MEETING OF THE STATE BOARD OF HEALTH.

April 10, 1907.

AFFAIRS CONSIDERED OF THE FISCAL QUARTER ENDING JANUARY 31,
1907, AND CALENDAR QUARTER ENDING MARCH 31, 1907.

Called to order by President Davis at 2 p. m. Present: Drs.
Davis, McCoy, Tucker, Wishard, Hurty.

Minutes of the regular meeting held January 11, 1907, and the
special meeting held March 15, 1907, read and approved.

REPORT OF SECRETARY FOR CALENDAR QUARTER ENDING MARCH 31, 1907.

The Sixty-fifth General Assembly, which adjourned March 10th, passed two new laws relating to the public health directly, and one law concerning Pure Foods and Drugs. The most important is the Statistical Law. This law requires the immediate reporting of deaths and contagious diseases, and requires that births be reported within twenty days. The penalty for disposing of a dead body in any way without first securing a permit is a fine of not less than ten nor more than one hundred dollars, and in addition, the coroner of the county shall disinter the remains and hold an inquest. The penalty for failure to report contagious diseases is a fine of not less than ten nor more than one hundred dollars, and the same penalty also applies for failure to report births. It is to be regretted that the legislature deemed it wise to place twenty days as the limit of time for reporting births. There is no reason why they should not be immediately reported. This extension of time will, in a degree, invalidate the law as it relates to births.

The next law of importance is termed "The Free Antitoxin Law." This act provides that any physician may secure free antitoxin by filling out a blank furnished by the State Board of Health, and presenting the same to any dealer in antitoxin. The said blank, when properly and completely filled out, as required, is a claim against city, town or county, as the case may be, in which it has been found necessary to purchase the antitoxin. A heavy fine and imprisonment is provided if the law is abused for personal gain.

It is also provided that only people too poor to buy antitoxin shall be supplied.

The third law in importance is the Pure Food and Drug Law. This law is now quite perfect. It is built upon the same principle as the national law and the enforcement is given to the State Board of Health. The appropriation for enforcement is fifteen thousand dollars per annum. One feature of this law which deserves special mention, in this brief abstract, is the clause which pertains to the proper slaughtering of animals for human food. The said section makes it unlawful to sell within this state, for human food, the carcass or parts of carcasses of any animal which has been slaughtered, prepared, handled or kept under unsanitary conditions.

"Unsanitary conditions," says the law, "shall be deemed to exist wherever and whenever any one or more of the following conditions appear or are found, to wit: If the slaughter-house is dilapidated and in a state of decay; if the floors or side walls are soaked with decaying blood or other animal matter; if efficient fly screens are not provided; if the drainage of the slaughter-house or slaughter-house yard is not efficient; if maggots or filthy pools or hog wallows exist in the slaughter-house yard or under the slaughter-house; if the water supply used in connection with the cleansing or preparing is not pure and unpolluted; if hogs are kept in the slaughter-house yard or fed therein on animal offal, or if the odors of putrefaction plainly exist therein; if carcasses or parts of carcasses are transported from place to place when not covered with clean white cloths, or if kept in unclean, bad smelling refrigerators, or if kept in unclean or bad smelling cold storage rooms."

The penalty is summary, for it is made the duty of the peace and all health officers to seize any animal carcass, or parts of carcasses of any domestic or wild fowl, eggs, game or fish, found to be unwholesome, and which have been slaughtered or prepared, handled or kept in unsanitary conditions, as defined in the law. Upon seizure, the officer shall deliver the same to the nearest police judge, or justice of the peace, together with all information obtained, and said police judge or said justice of the peace shall issue warrants of arrest for all persons believed to have violated the provisions of the law and said case shall be tried at an early date thereafter. Any person found guilty of violating any of the provisions of this section shall be fined not less than ten nor more than one hundred dollars for each offense and the meat in question shall be drenched with kerosene oil or rendered into grease in tankage as the court may direct.

HEALTH OF THE STATE DURING THE QUARTER.

It seems that the public health during the quarter was not quite as good as in the corresponding quarter last year. Grippe, typhoid fever and measles prevailed unusually. The deaths ran higher than in the same period last year. The following tables show the conditions in actual figures in regard to smallpox and typhoid fever:

SMALLPOX COMPARISON FOR FIRST CALENDAR QUARTER.

Date.	Number of Cases Reported.	Number of Deaths.	Number of Counties Invaded.
January, 1906.....	80		10
January, 1907.....	232	3	15
February, 1906.....	152		15
February, 1907.....	241		25
March, 1906.....	124		16
March, 1907.....	221		20
Total, 1906.....	356		41
Total, 1907.....	694	4	60

TYPHOID FEVER COMPARISON FOR FIRST CALENDAR QUARTER.

Date.	Number of Cases Reported.	Number of Deaths.	Number of Counties Invaded.
January, 1906.....	175	33	52
January, 1907.....	688	65	50
February, 1906.....	117	29	38
February, 1907.....	312	46	45
March, 1906.....	258	37	46
March, 1907.....	304	99	33
Total, 1906.....	550	99	136
Total, 1907.....	1,302	151	128

VISITS BY THE SECRETARY.

January 4th, Seymour.—On this date the secretary visited Seymour, in order to deliver an address before the Jackson County Farmers' Institute. The subject was "Prevention and Cure of Tuberculosis," and was illustrated by lantern pictures. The audience overflowed the public hall that was provided and it was said that a hundred or more were turned away. The lecture was well received, a vote of thanks was given and also resolutions of commendation for the State Board of Health and its work were passed.

January 8th, Noblesville.—On this date the secretary visited Noblesville, in order to confer with the authorities in regard to an outbreak of "winter cholera." This city, almost every year, has an outbreak of diarrhoeal disease, when the ice breaks up in the

river. It is the theory that poisons form under the ice from decomposition of the sewage from the cities above, and the tubular wells supplying the city with water, and which are driven in the bottom of the river, are more or less injured by the broken ice, and this lets the poisoned water into the public supply. It was estimated that 500 cases of so-called "winter cholera" occurred and subsequently a light epidemic of typhoid fever appeared. The old advice was given, that precautions should be taken by protecting the tops of the wells in the river with masonry or sealed crib-work in order to keep back the ice which so frequently causes the well tubes to leak when it breaks up. This would be the cheapest remedy, but it would be far better if Noblesville would drive new wells above high-water mark, so that tubes would never be subjugated to the breaking influence of floating ice.

January 12th, Terre Haute.—Upon invitation of the city health officer, the secretary visited Terre Haute in order to confer with the council in regard to the public water supply. A mild epidemic of typhoid fever had appeared and analyses of the public supply were made by a local chemist. His report was adverse to the water furnished by the Waterworks Company. As his results of analyses were opposed to those of the State Laboratory, a conference seemed necessary. A survey of the situation developed the fact that, with the exception of one case, all the typhoid reported occurred in persons who did not drink the city water supply. This fact, together with the results of the investigation of the State Board of Health, led to the conclusion that the public supply was good and probably not to blame for the epidemic.

January 22d, Hammond.—Upon invitation of the Hammond Ladies' Civic League, and the city Board of Health, I visited Hammond, to confer with the authorities named, and to deliver the usual lecture upon "The Prevention and Cure of Tuberculosis." In the forenoon of my arrival, I made a talk to the high school upon "Personal Hygiene;" in the afternoon I made a talk to the teachers upon "School Hygiene," and in the evening, in the opera house, delivered a lecture to a large audience assembled in the same. As said, the lecture delivered was the usual one upon "Tuberculosis, Its Prevention and Cure." The lecture was illustrated. The audience passed resolutions commending the work of the State Board of Health, and also of thanks for the lecture. All the papers gave most favorable notices, and the secretary believes much good resulted from the visit.

February 10th, Covington.—In response to an invitation issued by the Women's Improvement Society, and the county and city health officers, I visited Covington, in order to deliver the usual lecture, entitled "Tuberculosis, Its Prevention and Cure." The audience room was filled to overflowing, and it was said that one hundred and more were turned away. The lecture was well received and the usual resolutions were passed. It certainly is true that this visit was attended with good results.

February 25th, Vincennes.—Upon request of the Local Women's Aid Society, and the city Board of Health, I visited Vincennes, in order to make sanitary inspection and advise the societies interested as to what could be done to better the sanitary conditions of the city. Another object of the visit was to deliver the usual illustrated lecture upon "Tuberculosis, Its Prevention and Cure." Upon arrival, together with the city and county health officers, an extended sanitary survey of the city was made. The greatest need to Vincennes is a comprehensive and efficient sewer system. The ground pertaining to this subject was thoroughly gone over with the parties interested, and they, in turn, would present the matter to the city council. The lecture in the evening was well attended and seemed to be thoroughly appreciated. The usual resolutions of thanks and confidence in the State Board of Health were passed.

March 5th, Peru.—On this date I visited Peru on account of smallpox, and also to confer with the county secretary and city health officer in regard to a prosecution for failure to report smallpox. Six cases of disputed smallpox were visited and all were discovered to be true smallpox. The prosecuting attorney was consulted in regard to the prosecution of the offending physician, who failed to report cases of smallpox, and as a result, he promised to push prosecution. Within ten days after this visit, the non-reporting physician was fined ten dollars and costs, the total sum amounting to \$92. This has had an excellent effect upon the non-reporting physicians of Peru and Miami County, for we are now informed that reports come in promptly and all physicians seem eager to obey the law.

March 12th, Peru.—On this date I visited Peru again in order to deliver a lecture upon "Personal Hygiene" at the Peru Young Men's Christian Association. Although the night was very rainy, and heavy thunder showers prevailed, still a large audience gathered in the assembly room of the Association. My address was well received and the usual resolutions of thanks and confidence in the State Board of Health were passed.

March 18th, Coatesville.—In accordance with an invitation of the local health officer and the city health officer, I visited Coatesville, in order to make sanitary survey of the schoolhouse. Said sanitary survey is presented herewith for action by the Board.

March 19th, Goshen.—On invitation of the Civic League and the city Health Board, I visited Goshen to advise in regard to the management of smallpox, and also to deliver the usual illustrated lecture upon "Tuberculosis, Its Prevention and Cure." The smallpox situation was very simple, only one physician declaring that the disease did not exist. He was quickly convinced, and promised to report the cases thereafter. The city council was urged to provide free vaccination, and this was done. The lecture was well attended and seemed to have made an impression, for several citizens arose in the audience, expressing gratification and offering thanks. The assemblage also passed resolutions of thanks.

March 26th, Greensfork.—Upon petition of citizens of Greensfork, I visited this town, in order to make a sanitary inspection of the schoolhouse. Report of said inspection is presented at this meeting for the Board's action.

March 30th, Edwards.—Upon petition from patrons, I visited Edwards, Johnson County, to inspect the schoolhouse at that point. A number of patrons were gathered at the schoolhouse upon arrival, which gave me an opportunity to explain and make plain the unsanitary conditions that existed. Full report of this visit is prepared for presentation for action of this Board.

April 2d, Greentown.—In accordance with a petition of the patrons of the school and urged by the Superintendent of Public Instruction, I visited Greentown to inspect the public school building. The county health officer accompanied me from Kokomo, and we, together with the city health officer, made the inspection. The schoolhouse was found old, dilapidated and unsanitary. A full report is presented to this meeting for Board action.

April 7th, Bath Township, Franklin County.—In accordance with petition from patrons, I visited Bath Township, Franklin County, in order to inspect four one-room schoolhouses, all of which were believed to be unsanitary. A full written report of these inspections is prepared for presentation to this Board for action.

SMALLPOX AT LAFAYETTE.

By A. W. Brayton, M. D.

According to request, I went to Lafayette to investigate smallpox, March 22d, arriving at 2 o'clock. Was met by Dr. Bitting and went at once to President Stone's office and conferred with him. Dr. Bitting stated that there were some four or five cases of variola among the students and that a considerable number had been exposed, but the eruption was observed in one or two of the cases. However, it is believed that less than 5 per cent. of the student body is not vaccinated, and inasmuch as President Stone issued a special order the day before, to be published in the *Purdue Exponent*, and made known to all the students, stating that those who had not been vaccinated within the last five years should be vaccinated at once, upon penalty of expulsion from the University, it is quite likely that by Monday all of the unvaccinated students will be vaccinated.

There is an epidemic of mumps in the University that is causing considerable sickness and interfering with the classes. The students are perfectly willing to be vaccinated and so are the people in whose houses they reside.

Dr. Bitting and I then called upon Dr. Moffett, health officer of West Lafayette, and examined the contagious disease returns of smallpox. One case is now well of smallpox. He escaped observation, was but moderately broken out and was not in the Detention Hospital.

Case 2, M. G. Hollowell, has been in the Detention Hospital two weeks, sent there by Dr. Moffett.

Case 3, W. R. Proctor, in the family of John Cromer, West Lafayette, diagnosed by Dr. Bitting and put in hospital.

Case 4, W. W. Kellmas, 108 Waldron street, West Lafayette, diagnosed by Dr. Bitting, and taken by him to the Detention Hospital March 18th.

Case 5, L. J. Smith, student, eruption March 18th, diagnosed by Dr. Moffett and taken to the Detention Hospital.

I visited these patients in the Detention Hospital at 4 o'clock and examined each one. The cases are undoubted smallpox of moderate type. There is also in the Detention Hospital a youth of 16 years, John Rogers, resident of Lafayette. He has been in the hospital two weeks. The physician in charge of the hospital is Dr. Youkey. The student said that the food was good, that the attention was sufficient and that they were comfortable. The sanitary condition of the hospital as regards heat, light, ventilation, bath-room, etc., is good. There is no trained nurse, however, the hospital superintendent and his wife doing whatever ward work is required and preparing the food for the five male patients.

In company with Dr. Bitting I visited Dr. J. D. Hillis, city health officer of Lafayette, and from him got a detailed history of the eighteen or twenty cases of smallpox that have been in Lafayette this winter. It was imported January 1st by two gypsy fortune tellers, who went from theater to theater and other public places telling fortunes. Therefore, the eighteen cases occurred in several different localities. Dr. Hillis had the entire history of each case in mind and evidently had paid much attention to tracing the sources, to fumigating the houses and public buildings where patients had been and in sending them promptly to the Detention Hospital.

The support of this hospital comes from three sources: A, the County; B, the city of Lafayette; and C, the city of West Lafayette. The health officers of each of these civic divisions are empowered to send cases to the Detention Hospital at their discretion.

Dr. Moffet has empowered Dr. Bitting as deputy health officer, permitting him to identify any cases that occur in the University, and if satisfied that they are smallpox, to take them personally to the Detention Hospital. Dr. Hillis stated that the medical care given by Dr. Youkey was sufficient, and that it was not necessary for Dr. Bitting to attend as physician any of the patients from the University in the Detention Hospital, but that he had no objection, under proper precautions, to Dr. Bitting's visiting the Detention Hospital for scientific purposes.

I found Dr. Hillis very courteous, very efficient and evidently the master of the situation. He is thoroughly conversant with the individual cases and numerous details.

After visiting the Detention Hospital I returned to the University and reported to Prof. Stone, assuring him that the disease was being efficiently handled, that the condition of the patients in the Detention Hospital was satisfactory, and that with the enforcement of vaccination, according to his order, I thought that but few other cases, if any, would develop among the students.

At 6 o'clock in the evening, I visited the Indiana State Soldiers' Home, spending an hour with Prof. Birges at the University, who is lecturing to the Nurses' School of thirteen students upon "Ventilation." I also visited Dr. Cunningham, physician in charge, and his assistant, Dr. Mayfield, both former students of yours in the Indiana Medical College, and who desired to be remembered to you.

From all that I could see in the visit of two hours in the evening and after dark, going through the wards of the hospital, I am satisfied that the sanitary conditions are good and that the medical officers are efficient and will use every means to prevent the spread of smallpox to that institution. With all three of the health officers, the local physicians and the doctors of the University working in unison, with a suitable Detention Hospital, to which patients are promptly sent, and with the coming of spring, I think that there will be no extension or long-contending duration of smallpox in the hospital in Lafayette or in the surrounding region.

I left Lafayette on a late train, reaching the city before midnight of the same day.

CONSIDERATION OF SANITARY SURVEYS OF SCHOOLHOUSES.

The following reports of inspections of schoolhouses were duly considered and action taken:

SANITARY SURVEY OF SCHOOLHOUSE AT COATESVILLE, IND.

On account of petition of patrons, the secretary, on March 18, 1907, made a sanitary inspection of the schoolhouse at Coatesville, Clay Township, Hendricks County.

Site.—The only method of approach to the school building is through

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two muddy alleys, both of which contain one or more manure piles. There are no sidewalks of any kind. The children are compelled to walk to the schoolhouse through these dirty alleys.

The ground upon which the schoolhouse is situated is low and damp, affording no place where children can play and exercise, except when the ground is frozen or except in very dry weather. The surroundings of the schoolhouse are not at all pleasant, the site not being good in any respect.

The Building.—The building is a two-story brick. No basement. Walls cracked in various places. Down-spouts broken and leaking at corners. Brick foundation. Built in 1881. Four rooms, two below and two above. There is a vestibule two stories high, and in said vestibule is placed the stairway for reaching the upper story. This stairway has, in all, twenty-five steps and two turns. The banisters are broken. If the building were to catch on fire when school was in session, there would certainly be a great loss of life in this narrow stairway, which has two turns. The floors throughout the building are worn. Plaster off in halls and in primary room. The rooms are heated by stoves; no ventilating ducts. The rooms are lighted from three sides. The lower rooms are always damp in wet weather.

Health of Pupils.—The teachers in every room reported not a little sickness. They all testified to the continued existence of colds, and in every room this winter there has appeared scarlet fever, measles and sore throat. In the first primary many children had sore eyes, and, as reported by the teacher, there had been considerable sickness.

Recommendations.—This schoolhouse is unsanitary, is built on an objectionable site, has an abominable approach, and is in every way a disgrace. As the testimony shows, sickness prevails the year round, and the better class of people are in favor of erecting a new building. However, an examination of the financial condition of the community shows that this year only \$7,000 is available for putting up a new structure. It is, therefore, proposed by the citizens who desire a new building that another year be allowed to pass by so this sum will double itself and be available two years hence.

I therefore recommend that this schoolhouse be condemned, and that the condemnation be made to take effect May 1, 1908.

After consideration, the following proclamation was unanimously adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in regular session at Indianapolis, April 10, 1907, that the schoolhouse at Coatesville, Hendricks County, Indiana, is old, dilapidated, insufficiently ventilated, improperly lighted, unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils, therefore it is

Ordered, That the said schoolhouse is formally condemned for school purposes and shall not be used for said purposes after June 1st, 1907.

Any school trustees, township trustee or school teacher or other person who may use said schoolhouse for school purposes after June 1st, 1907, shall be promptly prosecuted as by the statutes provided.

INSPECTION OF SCHOOLHOUSE AT FOREST, IND.

It is found:

First.—That part of the children have to go through an alley which is very dirty, and in a wet season they claim it has mud shoe-top deep. There is a barn on this alley from which all the dirt is thrown direct into the alley and not into a box.

Second.—Whenever it rains the water stands in large puddles entirely in front of the schoolhouse and part of the front yard. The north part of the yard looks like a small lake, and it takes this water from three (3) to four (4) days to soak in.

Third.—At the last rain, about a week ago, the water stood about eight (8) inches deep in the basement of said school building. It has been claimed by some of the citizens to be much higher than eight inches in the past when they have heavy rains.

Fourth.—The basement walls, March 21st, were very damp. The basement floors over the entire building were wet.

Fifth.—The dry closets have practically no ventilation at all. There is a stack heater, but there are no vault heaters nor vault flues, and when the water runs in the basement, as it did the other day, it washes contents of closets out into the basement. There is no way of burning the closets out, as there should be in all first-class dry closets, there being no vault heaters. The janitor says that it takes a day to burn the closets out, and it shows it from the way the door and ceiling of this closet has been charred.

Sixth.—Under the furnaces in the cold air duct which supplies the rooms, the water was about six inches deep and it had been there for several weeks.

Seventh.—While we were there, March 21st, the odors from the basement closets permeated the entire building. Just last Friday, March 15th, the janitor fumigated the house with formaldehyde which he claims has to be done every day.

Eighth.—The front entrance is badly cracked, and in some places you can run your hand between the brick work, caused by settlement and weather. The foundation is made with Kokomo limestone, which slacks and disintegrates when exposed to the weather. You can go along and chip this stone in many places. The foundation and basement walls are cracked in several places, and the area around the cellar windows is full of rubbish and filth.

Ninth.—The walls on the first story are very damp and the paper is falling off in the room that is papered.

Tenth.—You can smell the gas and fumes from the furnace in all the rooms, and the teachers claim it is impossible to heat the rooms to a uniform temperature. In the southeast room it is impossible to heat the floors. The northeast room is too hot on the inside with no circulation of air on the north side of room. It takes on an average of one hundred and thirty (130) tons of coal a season to heat this building, and then it is not satisfactory.

Eleventh.—The walls of the first and second floor are cracked, due partly from settlement and partly from poor brick work, in several places, especially over the windows.

Twelfth.—The roof, which is of slate, has sagged in many places, and on examining the plates upon which the rafters rest I find that they are tipped up on the inside, showing there is an outward thrust from the roof rafters. I also found that the rafters have sagged several places from two (2) to four (4) inches and around the chimney have entirely pulled away.

Thirteenth.—When it was originally built it was braced with seven-eighths ($\frac{7}{8}$) inch stuff to the ceiling joist. In the majority of cases these seven-eighth-inch boards have a bow of about four (4) inches. The slate, so far as I can see, is in good condition, with these exceptions.

Fourteenth.—The stairways are four (4) feet six (6) inches wide, with winders at each landing from basement to second floor. The stairs are in some places very weak, especially at the first winders from the second floor.

Fifteenth.—In the primary room they have forty (40) pupils; in the other room on the first floor they have fifty-seven (57) pupils; in the high school on the second floor they have about thirty-five (35) pupils, and the desks are arranged diagonally across the room so as to get the light over both the right and left shoulders. In the other room on the second floor they have fifty-three (53) pupils. This room is kept entirely too hot; the teacher informs me that if the other rooms are kept warm, his room is that way all the time.

Sixteenth.—They have a six-inch tile from the building to a tile ditch, which is located about a quarter of a mile from said building.

Seventeenth.—It is claimed by the citizens and physicians attending the following pupils that their death was caused indirectly from this schoolhouse: Olive Jenty, and Merle Shoemaker, who were attended by Dr. Hornaday; Blanche Stockburger and Lillian Dunbar, who were attended by Dr. Suhrey; also Mable Blair, who was attended by Dr. Cooper.

Eighteenth.—The trustee, five of the citizens, and one of the advisory board, accompanied me to the building. We were in the building perhaps two hours, and when we came out every man claimed to have a headache. I cannot say in regard to the others, but my headache was extremely severe, and I do not see how the children stand it to stay in these rooms day after day. I noticed that there was not a real rosy-cheeked pupil in the school building.

The ceiling height in the basement is eight (8) feet, with about three (3) feet above grade. The first and second stories are twelve (12) feet, eight (8) inches. The attic is open through the tower, in which pigeons and birds have their nests, and it is a very filthy place.

After due consideration of this report, the following order and proclamation was unanimously adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in regular session at Indianapolis, April 10th, 1907, that the schoolhouse at Forest, Clinton County, Indiana, is old, dilapidated, insufficiently ventilated, improperly lighted, unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils, therefore it is

Ordered, That the said schoolhouse is formally condemned for school purposes and shall not be used for such purposes after June 1st, 1907.

Any school trustee, township trustee or school teacher or other person who may use said schoolhouse for school purposes after June 1st, 1907, shall be promptly prosecuted as by the statutes provided.

INSPECTION OF SCHOOLHOUSE AT COLFAX, INDIANA, APRIL 4, 1907.

Site.—The site is high, rolling, probably eight trees on it. Driven well in the southwest corner of the yard. The ground comprises about one acre of land, rolling, clay soil, and subsoil. The building is situated 90 feet south of the Vandalla Railroad and 400 feet southwest of the Big Four road. It is approached by cement walks in street and a board walk from the street to the door. There are no walks on the ground and no outbuildings.

Building.—The building is a two-story brick; was built in two parts, the main part, in 1876, two stories, 50x50 feet. An addition was built to the south end of that in 1882, two stories, 25x30 feet. The roof is slate and tin.

Basement.—This was excavated after the addition was built and is entered from the south end of the addition. Comprises a room about 20x25x10 feet. There are three furnaces in this basement. The first is under the addition, round metal sheetiron, heating the addition. From that room, a passageway about four feet wide is dug out under south half of the main building, in which a furnace is located. Another passage is connected on to locate the third furnace under the north half of the main building. These furnaces are large, round and of heavy sheetiron. Each furnace is supposed to heat two rooms. There are no ventilators in the basement.

Hall.—The building faces the southwest. The hall is 11x48x14. There is a cloakroom at each end of the hall about four feet wide, and closets under the stairway. The stairway goes up at each end of the hall with a half turn at the top. They are about three feet wide, with a board banister, are pretty well worn, but seem in fair condition.

First Primary Room, Main Building.—Size 25x40x14 feet. Enrollment is 45; average attendance, 38. Lighted by three windows on the north and two on the east. Blackboards are of slate, good condition, seats fair. Heating by furnace, ventilated by windows. All windows in the building have wooden shutters. Floor is worn badly, but kept oiled and clean. There are two pillars in the center of the room supporting a joist under the ceiling which is necessary to stay the floor of the upper room.

Intermediate Room, Main Building.—Enrollment, 39. The size of this room is 25x40x14; average attendance, 35. Blackboards of slate, in good condition. Seats, fair condition. Heating, ventilation, windows, the same as the first room described. The floor is badly worn, with cracks between the boards and would have to be replaced if used another year. The drinking facilities in both rooms are tin buckets and tin cups. The light in both of these rooms is good.

Fourth Grade, Addition.—Enrollment is 30; attendance, 25. This

room is 23x28x14. Floor is badly worn and conditions as to light, heat, ventilation, etc., the same as the other rooms. This room opens both into a hall and to the outside next to the street. This hall that opens into the street is used as a cloakroom. It is about 5x10 feet.

Second Floor.—Seventh and eighth grade room. Its size is 25x40x14. Enrollment, 30; average attendance, 26. The blackboards in this room are painted on the plastering, on the east and south sides of the room. The conditions as to heat, ventilation, light, etc., are the same as in the lower rooms. The seats are comparatively new and in good condition. The paper on the walls and ceiling is badly smoked; in many places the paper is torn, showing the plastering to be badly cracked. Also marks as though the roof had been leaking and water had run down on the paper. The floor is worn. The cloak room consists of a partition set up in the east side of the room next to the door, with hooks on the wall and on the partition on which to hang their cloaks and hats.

Fifth and Sixth Grades.—They are in the addition. Size of this room is 23x28x14, and the condition as to walls, ventilation, floors, light, etc., is the same as the other rooms. The enrollment in this room is 25, average attendance, 23.

High School Room.—Main building. Size is 25x40x14. Enrollment, 40; average attendance, 37. Seats in this room are comparatively new and in good condition. The same conditions obtain as in the seventh and eighth grade rooms as to walls and ceiling, floors and ventilation. There is a small room partitioned off in the hall for a recitation room. This is about 10x20 feet.

Remarks.—This building is so close to the railroads that they are obliged to close the windows, without regard to heat or ventilation, during the greater part of the day, in order to hear the recitations, as the noise of the trains switching and changing around is so loud that it would be impossible to hear anyone talk while they are at work. The principal estimated that there was an hour a day lost in recitations on account of the noise, and through my own observation during twenty minutes when a freight train was switching around there today, I think that his estimate is very conservative, indeed. The principal also complains of the heating and ventilation. There is no means of ventilating any of the rooms except by windows and doors, and the heating facilities are such that at times it is almost impossible to heat the room sufficiently to allow the pupils to continue in school. He has not had to close the building on account of cold this winter, but has had to shift the pupils from one room to another on several occasions. The trustee, Mr. Bailey, reports that the insurance on the building has been canceled by the companies who had written the policies, on account of the bad risk of the building, and the trustee, and an ex-member of the Board, Mr. George Rhinehart, both gave it as their opinion that the building was unsafe, that during a heavy wind or storm, it would shake very perceptibly. Outside walls are cracked and in bad condition.

Recommendations.—I would respectfully recommend that the building be condemned as unsanitary, insufficiently heated, and the location is such that it is a loss and detriment to the township to have the building located on its present site. I would also suggest that in the condemnation and ordering of the erection of a new building, that an order be given that a

different site be chosen. There are two sites near the town, either of which would be very desirable for the location of the building, as there would be sufficient elevation for a basement and good drainage, plenty of room and absence of noise to attract the attention of the pupils.

After due consideration of the above report the following proclamation was unanimously adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in regular session at Indianapolis, April 10th, 1907, that the schoolhouse at Colfax, Clinton County, Indiana, is old, dilapidated insufficiently ventilated, improperly lighted, unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils, therefore it is

Ordered, That the said schoolhouse is formally condemned for school purposes and shall not be used for said purposes after June 1st, 1907.

Any school trustees, township trustee or school teacher or other person who may use said schoolhouse for school purposes after June 1st, 1907, shall be promptly prosecuted as by the statutes provided.

SANITARY INSPECTION OF CENTER GROVE, WHITE RIVER TOWNSHIP, JOHNSON COUNTY, HIGH SCHOOL BUILDING.

Inspection made March 30, 1907.

Site.—Is situated on a hill, and is, indeed, beautiful in every respect. The ground has a clay sub-soil, gravel about ten feet below level. Drainage excellent.

Building.—Built about twenty-five years ago. Two-story brick. Stone foundation. No basement. Walls slightly sprung and slightly cracked. It was found necessary to pass iron rods through the building several years ago. There is a broad gravel play-ground in front, but no walks. The entrance is by a narrow vestibule, and a narrow winding stairway leads to the upper story. This stairway has two turns, is steep, $2\frac{1}{2}$ feet wide, has eighteen steps and is much worn. It makes one shudder to look at this stairway and contemplate what would happen if the house were to catch on fire when school was in session. Doubtless, many lives would be lost in this trap.

Interior.—Four rooms, two above, two below. The lower rooms are entered first, by outside door into vestibule, then by narrow door into the cloak room, and from thence by narrow door into schoolrooms. Three turns are necessary to enter the lower rooms. The cloakrooms are cold and damp.

Primary Room.—This is on the lower floor and on the north side of the building. It is $24 \times 28 \times 12$, giving space for forty children. Enrollment and average attendance not secured. There were thirty-eight desks in the room. Lighted by three windows, two on the north and one on the west. Windows very narrow and small, and although the day was very bright, this room was dark. There is much complaint on account of the darkness of

the rooms. Considerable sickness prevailed last winter. Coughs, colds, headaches, eyeache, were commonly complained of.

Second Room.—Is on the first floor and grades 4 and 8 taught therein. This room was badly crowded, and contained forty-five seats. Enrollment and average attendance not secured. Room is 24x28x12, and contains 8,064 cubic feet, furnishing cubic space for forty students. Lighted by two windows on the south and one on the west. Although the day was bright, this room was very dark and much complaint is made of this fact by the students. The diseases noticed were coughs, colds, headaches, eyeache.

High School.—This room and the recitation room occupies the entire upper story. High school room, 47x24x12, furnishing a cubic space of 13,536 cubic feet, which is room for sixty pupils. There were forty-six desks in this room. The room is lighted by five windows. Two of these windows are on the south and three on the west. Two of the three western windows are in vestibules which open out from the main room and furnish little light. The room was very dark, although the day was bright. Much complaint among students and patrons on account of the darkness of this room. At one time the high-school room occupied the entire upper floor, but a partition has been thrown across the entrance end, in this way making a room 24x10. This room is lighted by three windows, two on the north and one on the west. There is a large glass window in the partition. This arrangement lessens the amount of light in the high-school room.

The outhouses are frame, in bad condition, at some distance from the building, with no walks leading thereto. In the yard is a long, low horse-shed, with thirty-two stalls. This shed was very foul with manure. The water supply is from a dug well 35 feet deep, and the water has a peculiar ground taste. Only a few pupils will drink it, most of them visiting a farmhouse nearby for drinking water.

Summary.—This is a miserable schoolhouse. The vestibule is a veritable fire trap, and the people should offer thanks, that inasmuch as the building has never caught on fire, therefore, lives have not been lost by crowding the narrow, steep, winding stairway. It is insufficiently lighted, producing eye strain and headaches. It is heated by stoves, which, of course, is always wrong, and ventilation is solely by windows and doors. The walls are cracked and the whole building is damp.

Recommendations.—I recommend that this schoolhouse be condemned, the condemnation to date from May 1st, 1907.

After consideration of the above report, the following proclamation was unanimously adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in regular session at Indianapolis, April 10th, 1907, that the Center Grove, White River Township, high-school building, is old, dilapidated, insufficiently ventilated, improperly lighted, unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils, therefore it is

Ordered, That the said schoolhouse is formally condemned for school purposes and shall not be used for said purposes after June 1st, 1907.

Any school trustees, township trustee or school teacher or other person who may use said schoolhouse for school purposes after June 1st, 1907, shall be promptly prosecuted as by the statutes provided.

REPORT OF INSPECTION OF SCHOOLHOUSE AT NEWBERRY,
GREENE COUNTY, INDIANA, MARCH 29, 1907.

Site.—The building is on a hill on the east side of town. The ground comprises about one acre. The soil is a mixture of clay and sand; no trees on the lot, and the approach is by gravel road. There are no walks about the premises. The site is a good one for building, as the ground slopes away in all directions and can have a good drainage from the school building to the river about a quarter of a mile north of the building.

Building.—The building consists of three rooms, brick, with shingle roof. The roof is in very bad shape, water spouts are broken and torn loose, and the woodwork around the eaves has rotted so that holes are appearing through the edges. The main building consists of two rooms with halls. No basement, and no ventilation except by opening in the walls, underneath the floors. Stone foundation of about 18 inches above ground. An addition has been added to the east, of a brick room, built of brick from foundation to top, and without slate or other means of checking the rise of moisture from the basement to the walls of the rooms. It has been built about twenty years.

The first primary room is the one-story addition, size 20x30x12 feet. Number of pupils enrolled, 60; average attendance, 53. Floor in good shape. Blackboards are of wood on two sides of the room; seats in fair condition; heating by stoves, ventilation by windows and doors. Diseases prevalent in this room were colds and sore throats; had no fevers or contagious diseases reported from the room during the winter.

Main Building.—Room, first floor, used for intermediate; size 25x38x12 feet. Enrollment of 55, average attendance, 45. Blackboards wood, on three sides. Seats in fair condition. Heated by stoves, ventilation windows and doors. Floor worn, but oiled and clean. The stove is situated about the center of the room and there is a wooden pillar in the center of the room to support the floor of the room above. Walls are cracked and paper torn and discolored, showing leakage and sweating of walls. The diseases were colds and sore throats.

The hall consists of a room about 7x20 feet used for cloakroom and storage; main entrance, 10x12 feet, and the stairway enclosed leading to the upper floor. The stairway in poor condition. The supports to the landing at the upper end have given away and have had to be propped up underneath by posts. It is considered unsafe.

Second floor consists of a hall used for recitation room, size 10x20x12, less the stairway, about 3½x10 feet. This room is lighted by three windows, heated by a stove, ventilated by windows.

The main room is 25x38x12, is used for the eighth grade and high-school. There are two teachers in this room. Enrollment, 65; average attendance, 58. Ceiling of the room is wood, blackboards slate and wood, floors are worn, room heated by a single stove, ventilated by windows. The plastering on walls badly cracked, paper discolored and torn in many places, showing a great deal of leakage from the roof.

The name of the trustee is Wm. Neff. Mr. Neff informs me that the building has been considered unsafe by the Board for the past two years. His advisory board accompanied us through the house during inspection and confirmed his report. The township is out of debt and in good shape to build at this time. I would advise the condemnation of the building, as being both unsanitary and unsafe, and is also entirely too small for the needs of the town. The population of the town is about 1,200, and, with a new, modern building, they could accommodate three or more school districts in the one building, which the trustee wished to do.

After consideration, the following proclamation was unanimously adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in regular session at Indianapolis, April 10th, 1907, that the schoolhouse at Newberry, Greene County, Indiana, is old, dilapidated, insufficiently ventilated, improperly lighted, unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils, therefore it is

Ordered, That the said schoolhouse is formally condemned for school purposes and shall not be used for said purposes after June 1st, 1907.

Any school trustees, township trustee or school teacher or other person who may use said schoolhouse for school purposes after June 1st, 1907, shall be promptly prosecuted as by the statutes provided.

INSPECTION OF SCHOOLHOUSE AT ORLEANS, ORANGE COUNTY, INDIANA, APRIL 8, 1907.

Site.—In the central part of the town, occupying one block. High and dry. Lot well covered with shade trees. Approach on the north and south by good cement walks, and from the street to the building. Building is surrounded by a good cement walk. Outbuildings are in good condition, with dug vaults and surrounded by high board fences, with a tight board fence, entirely separating the two sexes. There are good cement walks leading to each of these buildings, which are kept in a very clean, sanitary condition.

Building.—The building is two stories, brick, with metal roof. The main part built in 1871. Two additions have been added to the building since then on the west. The last addition on the south end of the west part was not well fastened to the building, and is beginning to pull away from it, at this time being a crack $1\frac{1}{2}$ inches wide at the top and probably $\frac{1}{4}$ of an inch at the base of the building, from top to bottom. Walls are in fair condition.

Basement.—This has been dug out under the west portion of the building and is a room about 18x20x10 feet. It has never been walled or floored. From this room narrow passageways have been dug to the hall in the center of the building and underneath the building, so that pipes for carrying steam to the different rooms and for ventilation in the upper story, could be placed under the building. The entire building is heated by steam from a furnace in this basement.

First Floor, Primary Room.—Size 30x30x12. The blackboards in this room are of slate on three sides of the room. Seats are in fairly good condition. Enrollment is 60, average attendance, 50. Windows, 5, about half of them with blinds. Seats arranged so that light falls over the back and right shoulder. Ventilation by windows. Floors are in fair condition, oiled and clean, but is pulling away from the wall at the north side of the room. Walls are papered and in good condition.

Intermediate Room.—Size 30x45x12. Blackboards in this room are painted on the plastering. Seats in fair condition. Enrollment, 40; average attendance, 37. Eight windows in this room, on the sides of the room. Ventilation by windows and doors. Floors oiled and in good condition. Walls in fair condition only, the papering on the outside wall being cracked and plastering cracked somewhat. Pillars in this room, supporting the floor of the room above.

Third and Fourth A Grade Room.—Size 22x30x12. Enrollment, 60; average attendance, 51. Blackboards, slate; six windows in the room, north windows without curtains. Floor is pretty badly worn, but oiled and clean. Walls in fair condition, ceiling is sagging probably four inches lower in the center than at the sides.

Fourth B and Fifth Grades.—Size 20x25x12. Blackboards, slate; seats fair. Enrollment, 63; average attendance, 54. Ventilation, windows. Five windows in this room, with shades to the windows. Floors oiled, fair condition, clean. Walls are good.

Second Floor, Sixth and Seventh Grades.—This room is 24x30x16. Enrollment, 52; average attendance, 47. Blackboards slate, seats fair, four windows in each side of room, blinds to the windows, ventilation by windows and airshaft in the northeast corner of the room. This airshaft consists of simply a square board box, and opening out into the room. Floors are sagged badly, but in fairly good condition, oiled and clean. Plastering cracked. Walls papered.

Eighth Grade and High-School.—Size, 30x45x16. Enrollment, 80; average attendance, 79. Blackboards slate, on four sides of the room. Seats good. Six windows, three on each side of the room, north and south. Blinds to each window. Ventilation, windows and air shaft. Floor fair condition, worn, but oiled and clean. Walls in fair condition.

The hall on the east side of the high-school room is used for library and reading and recitation room. It is 14x24x16 feet. There are six windows in this room, with four of them curtained. Library comprises 500 volumes, all new and up-to-date books of reference. The hall between this room and the addition is 14x32x16, and divided by a partition, so that the south half can be used as the superintendent's office, giving him a room 14x18x16. The other part is used as a part of the stairway and a cloakroom. There are no cloakrooms on this floor. On the west side of this hall is a room 24x30x16, used for a chemical laboratory and recitation room for the high-school and eighth grade. The description of this is the same as the other rooms, as to walls, floors and windows. Adjoining this on the south is a room 15x24x16, which is used for the study room for a few of the pupils who were taking special courses in typewriting, bookkeeping and a general business college course. Ventilation of this room is by two windows on the west, which have no blinds, and the room, owing to its situation, is rather dark, as there is no light except on the west.

Remarks.—The playing-grounds and everything around it shows the utmost care and attention to neatness and cleanliness. There were no bad odors in the building, no smell of foul air in the basement, and everything seemed to be as clean as it was possible to make it, which is owing to the fact that the superintendent, Prof. A. C. Payne, personally superintends this work and sees that it is thoroughly carried out. If it were not kept in that condition, it would be unfit for use as a school building in very short order. It will be impossible to remodel this building so as to give perfect ventilation in its present condition. It is old, would not stand the repairs and is not on the proper site for the erection of a new building, being surrounded on three sides by business blocks, on the fourth side by residences, and also having an iron hitch-rack on the three sides which are used for a public hitching place for the entire community. I was accompanied on this inspection by Dr. Thos. B. Ritter, city health officer, and by Superintendent Payne, who showed me every courtesy and facility for examining the building. After the inspection I met Dr. G. W. Taylor, one of the town trustees, and talked with him in regard to the building and the feeling of the patrons in the matter. I was informed that a majority of the taxpayers and patrons felt that they needed a new, modern, sanitary building that would give them more room; that the rooms were overcrowded as it is. The superintendent also thought that in such a building as that there could be a consolidation of nearly all the schools in the township in that one school, therefore making it more economical and better for the patrons of the township. He states that the town is supplied with good gravel roads leading in all directions.

Recommendations.—I would recommend that the building be condemned for school purposes and that notice of the same be sent to Dr. G. W. Taylor, trustee.

After consideration of the report, the following proclamation was unanimously adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in regular session at Indianapolis April 10th, 1907, that the schoolhouse at Orleans, Orange County, Indiana, is old, dilapidated, insufficiently ventilated, improperly lighted, unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils, therefore it is

Ordered, That the said schoolhouse is formally condemned for school purposes and shall not be used for said purposes after June 1st, 1907.

Any school trustees, township trustee or school teacher or other person who may use said schoolhouse for school purposes after June 1st, 1907, shall be promptly prosecuted as by the statutes provided.

**SANITARY INSPECTION OF GREENSFORK SCHOOLHOUSE No 17,
CLAY TOWNSHIP, WAYNE COUNTY.**

Inspection made March 26, 1907.

Site.—The present site is satisfactory, although in places a little lower than the street. Area about one-half acre. Soil is quite gravelly and hence very rarely wet. The approach to the schoolhouse is by means of a broad cement walk, leading from another cement walk which lines the main street.

Schoolhouse.—Built in 1877, two-story brick, stone foundation. No basement. Many cracks in walls, down spouts broken on all four corners, thus contributing to the dampness of the walls. Plastering has been washed out from between the bricks where the rainwater has come down the broken spouts. House contains four rooms, two above and two below, and the building faces south. All rooms heated by stoves and ventilation by windows. Entrance is by vestibule, which is two stories high. Narrow stairway, twenty stairs and one turn, very steep and badly worn, leads to the upper story. This stairway constitutes a plain fire trap. If the building were ever to catch fire, a great many lives would undoubtedly be lost in this narrow stairway and vestibule. The vestibule is unwarmed, the ceiling above is broken, and through the steeple can be seen the sky. This cold, damp vestibule furnishes the cloakroom facilities for the whole school.

Summary.—This schoolhouse is very faulty in construction, is improperly warmed, improperly heated and improperly ventilated. Much sickness prevails among the pupils and there is general complaint in the neighborhood concerning the unsanitary features of the building.

Recommendations.—I recommend that this building be condemned on account of its unsanitary conditions, and that said condemnation be dated from May 1st, 1907.

After consideration of the report, the following proclamation was unanimously adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in regular session at Indianapolis April 10th, 1907, that the Greensfork schoolhouse No. 17, Clay Township, Wayne County, Indiana, is old, dilapidated, insufficiently ventilated, improperly lighted, unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils, therefore it is

Ordered, That the said schoolhouse is formally condemned for school purposes and shall not be used for said purposes after June 1st, 1907.

Any school trustees, township trustee or school teacher or other person who may use said schoolhouse for school purposes after June 1st, 1907, shall be promptly prosecuted as by the statutes provided.

**SANITARY SURVEY OF FOUR SCHOOLHOUSES SITUATED IN BATH
TOWNSHIP, FRANKLIN COUNTY, APRIL 8, 1907.**

SHEWMAN SCHOOL, DISTRICT NO. 5.

Site.—This schoolhouse is situated at country cross roads, covers about one-half acre of ground, is high and passably well drained. This is a passably good site.

Building.—The building is frame, constructed fifty-one years ago, one room, foundation stone, which is broken and dilapidated in places. Roof and weatherboarding in bad condition, no basement, chimney dilapidated. Outhouses abominable in every particular; dug well, but water is not good and pump broken.

Interior.—Rooms, 30x28x14. Enrollment, 32. This gives ample cubic space for each pupil. Blackboards good, heated by stoves and ventilated by windows, floor is very bad, the plastering is cracked on the walls and on ceiling. The teacher reports prevalence of coughs, colds, headaches and eyeache.

Summary and Recommendation.—This is an old, dilapidated and worn-out schoolhouse, and very unsanitary. I recommend that it be condemned for school purposes and that the condemnation be dated June 1st.

After consideration of this report, the following proclamation was unanimously adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in regular session at Indianapolis April 10th, 1907, that the Shewman schoolhouse, District No. 5, Bath Township, Franklin County, Indiana, is old, dilapidated, insufficiently ventilated, improperly lighted, unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils, therefore it is

Ordered, That the said schoolhouse is formally condemned for school purposes and shall not be used for such purposes after June 1st, 1907.

Any school trustees, township trustee or school teacher or other person who may use said schoolhouse for school purposes after June 1st, 1907, shall be promptly prosecuted as by the statutes provided.

DUBOIS SCHOOLHOUSE, DISTRICT No. 9.

Site.—The site is at the cross roads, is very low and damp. Water stands upon the grounds in wet weather, outhouses are old, dilapidated and abominable; no paths leading to them; dug well, water bad and pump broken.

Building.—The building is old, built in 1859, forty-eight years ago; one room, weatherboarding broken in places, roof very bad, sills rotten, the foundation is stone, broken and torn in places; chimney badly broken and dilapidated.

Interior.—The room is 32x27x14 feet. Enrollment of pupils is 21, average attendance, 18. Ample space for the pupils. Heated by a wood stove, lighted by six windows, three on each side, with no shades. Black-

boards good, floor very bad, ceiling and walls cracked in places, the plastering has fallen from the ceiling and the broken place covered with heavy paper held together by tacks. Coughs, colds and headaches prevail among the students. One student has complained of an eyache and probably suffers from astigmatism.

Summary and Recommendation.—This is an old building, dilapidated, very unsanitary and unfit for school purposes. I recommend that the same be condemned as unfit for school purposes and that the condemnation be dated June 1st.

After consideration of the report, the following proclamation was unanimously adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in regular session at Indianapolis April 10th, 1907, that the Dubois schoolhouse, District No. 9, Bath Township, Franklin County, Indiana, is old, dilapidated, insufficiently ventilated, improperly lighted, unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils, therefore it is

Ordered, That the said schoolhouse is formally condemned for school purposes and shall not be used for such purposes after June 1st, 1907.

Any school trustees, township trustee or school teacher or other person who may use said schoolhouse for school purposes after June 1st, 1907, shall be promptly prosecuted as by the statutes provided.

HETRICK SCHOOL, DISTRICT No. 8.

Site.—The site covers about one-half acre of ground lower than the road, is very damp and wet. In rainy weather pools of water stand upon the playgrounds. Outbuildings abominable, with no paths to them; dug well, pump broken, water has offensive taste.

Building.—The building is old, dilapidated frame, about fifty years old; stone foundation, which is broken, and in one place almost entirely removed; sills are rotten, roof is very bad and leaks, weather boarding broken in places, steps to front door broken and dilapidated, chimney badly worn.

Interior.—The interior is 28x33x44, and is heated by a stove. Enrollment, 10; average attendance, 9; ample space for pupils. Lighted by six windows, three on each side; no window shades; wooden blackboards, floors badly worn, plastering cracked. Coughs, colds and headaches prevail among the pupils.

Summary and Recommendations.—This is an old wornout schoolhouse, and is unfit for school purposes. I recommend that it be condemned for school purposes and that the condemnation be dated June 1st.

After consideration of the above report, the following proclamation was unanimously adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in regular session at Indianapolis April 10th, 1907, that

the Hetrick schoolhouse, District No. 8, Bath Township, Franklin County, Indiana, is old, dilapidated, insufficiently ventilated, improperly lighted, unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils; therefore, it is

Ordered, That the said schoolhouse is formally condemned for school purposes and shall not be used for such purposes after June 1st, 1907.

Any school trustees, township trustee or school teacher or other person who may use said schoolhouse for school purposes after June 1st, 1907, shall be promptly prosecuted as by the statutes provided.

MIXERVILLE SCHOOLHOUSE, DISTRICT No. 7.

Site.—Site covers about one-eighth of an acre, is high and dry and good in every respect; outbuildings are abominable, no paths leading to them; dug well, pump broken, water has a bad taste and not used.

Building.—The building is a frame, one room; stone foundation, which is broken and torn; weatherboarding broken, roof bad, chimney in passable condition. Building is fifty-one years old and dilapidated, steps old and broken.

Interior.—The interior is 27x33x14. Enrollment, 24; average attendance, 22. Floors very bad, patched and broken in places; lighted by seven windows, four of them having shades and three without shades; plastering is cracked and broken in places; blackboards painted on walls, but some are slate. The children have coughs, colds, headaches and eyeache.

Summary and Recommendations.—This is an old, dilapidated schoolhouse, and unfit for school purposes. I recommend that it be condemned for school purposes and that the condemnation be dated June 1st.

After consideration of the above report, the following proclamation was unanimously adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in regular session at Indianapolis April 10th, 1907, that the Mixerville schoolhouse, District No. 7, Bath Township, Franklin County, Indiana, is old, dilapidated, insufficiently ventilated, improperly lighted, unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils, therefore it is

Ordered, That the said schoolhouse is formally condemned for school purposes and shall not be used for such purposes after June 1st, 1907.

Any school trustees, township trustee or school teacher or other person who may use said schoolhouse for school purposes after June 1st, 1907, shall be promptly prosecuted as by the statutes provided.

The following report, by Dr. Knabe, was read and ordered spread of record:

REPORT OF THE INVESTIGATION OF AN EPIDEMIC AT YOUNG AMERICA, IND.

By Dr. Helene Knabe.

By order of Dr. J. N. Hurty, secretary of the State Board of Health, the undersigned, on February 28th, went to Young America, Indiana, to investigate what was claimed to be a wholesale infection of malaria. There was some difference of opinion among the physicians, and Dr. G. D. Marshall had asked for the aid of the State Board of Health in order to clear up the matter.

Arriving at Young America, I attempted to consult with the physicians, of whom there are three in the town, but was unable to gain any information as to the situation; instead, was met in one case with discourtesy. As a consequence, my observations were limited to the patients of one physician.

In regard to the beginning of this trouble, I ascertained the following: Cases of malaria were frequently diagnosed by the three physicians during the fall season of last year, though only Dr. Marshall, being in possession of a microscope, tried to confirm this diagnosis by the examination of fresh blood in which he found what he considered to be plasmodium malariae. The cases improved rapidly under antiperiodic treatment, followed by the usual tonics for post-malarial anemia, and nothing further was thought of it.

With the advance of the winter season, there still continued to occur some cases in which the symptoms resembled closely those seen in the fall, and as Dr. Marshall found the conditions in the blood of those patients the same as present in the previous cases, he saw no occasion to change either his diagnosis or treatment. The other two physicians made a diagnosis of la grippe. As far as I was able to judge by an interrogation of patients who were ill during October and November, they had practically the same symptoms as those which developed the disease during my stay at Young America.

Symptoms in severe cases of this kind are as follows: The onset is usually sudden, sometimes preceded by a short period of general malaise; the patient is seized with an attack of vertigo, blindness and nausea. Many cases present history of prolonged vomiting, and those most severe were accompanied by profuse watery diarrhoea and great prostration, bordering on collapse. Pain in the epigastric region is present in all severe cases. A few cases gave a history of bloody stools. Liver and spleen were very tender to pressure; backache pronounced only in such cases where the prominent feature of the disease was neuritis. The temperature was, as a rule, subnormal, very few cases showing fever of 103° to 105° at the beginning. Distinct rigors were rare. Patients complained of chilly sensations, rapidly becoming very weak and showing more or less cyanosis, presenting in a few hours the aspect of a very severe illness.

A peculiar feature in these cases was the extreme bradycardia. The pulse ranged from 52 to 60 per minute, and very few cases did I see with a pulse rate of 110 to 112.

The blood pressure was universally low. The temperature was mostly

subnormal and often remained so for days. We recorded some of 96.5°. The usual rate was about 97° to 97.5°.

The nervous symptoms in all cases were very pronounced. Aside from those mentioned, there appeared in a majority of cases as a complication a severe neuritis. Herpes labialis, and the various hyperaesthesias and paraesthesias were common. Herpes zoster occurred in one case. The mental depression seemed to be far out of proportion to the local symptoms.

Respiratory symptoms were usually absent. A few cases presented symptoms of slight pharyngitis, which subsided promptly on application of an antiseptic gargle. The lungs and bronchial tubes were entirely clear in all cases which I examined, with the exception of two children, one and three years of age, respectively, where I found a few fine, moist rales.

A variety of symptoms involving the skin were present in this epidemic. There was itching over the whole surface of the body, followed by either diffuse redness or circumscribed elevated patches. Where the latter were present part of the swelling subsided in three or four days, leaving a small, shot-like eruption of blue-red color. I saw the last-named eruption in five cases.

Another symptom, which for some time made diagnosis a little doubtful, was extensive exfoliation. While not present in every case, it was very profuse where it did appear. The character of this exfoliation was variable; the epidermis separating either in very fine scales or large flakes. A constant symptom was jaundice without the presence of clay-colored stools, a fact which makes it appear that it was of haematogenous origin.

Considering the fact that Dr. Marshall claimed to have found plasmodium malariae in the blood of these patients, I examined fresh, as well as stained preparations, in every case which developed during my stay at Young America. The blood presented a very unusual appearance. The variation in size of the red corpuscles was the greatest I have ever had occasion to observe in any specimen of fresh blood. Leucocytosis was not universally present. The amount of hemoglobin was about 70 per cent. according to the Tallquist scale. Vacuolation appeared in the red corpuscles, and their peculiar shape, as well as the fact that they were in reasonably small numbers, probably made the resemblance to hyaline forms of the aestivo-autumnal parasite most striking. Aside from this, the specimens contained large numbers of colorless granules, about 2 microm. in diameter, each of which contained a slightly refracting dot, giving the appearance of a minute nucleus. These granules were so much larger than the ordinary blood test that I was in doubt for some time as to their exact classification. I am of the opinion that they were merely evidences of an extreme hemolysis, but must confess that they resemble the spores of plasmodium malariae in some respects.

I sent several preparations to Dr. Ludwig Hectoen of Chicago, with a short note; but as my letter of explanation, which I subsequently wrote, was not delivered to him, but returned to me, the preparations were spoiled before he could make a careful examination, and it was impossible to determine whether or not malarial parasites were present in the blood.

The letter from Dr. Hectoen stating his opinion is appended to this report.

In summing up the conditions, it is readily seen that with symptoms of the kind described, these cases when they occurred in October and November, could be taken for the algid type of aestivo-autumnal malaria (Osler on Malaria), rare though that condition may be in our climate. Indeed, Dr. Gray, who was affected with this trouble last fall, made this diagnosis of his own case. He admitted suffering from a train of symptoms the same as detailed, which readily improved under anti-periodic treatment. Dr. Marshall developed the same disease and treated himself for malaria with good results. On the other hand, the purely abdominal type of influenza, as it would appear to be here, is not a frequent condition either (Osler on Influenza), and the absence of respiratory symptoms would make the diagnosis at least a little doubtful unless the epidemic feature of the disease were prominent. That this was not the case is shown very well by the history obtained in some families where one member was attacked in the early fall season, the others remaining well for weeks, eventually to become ill with the same symptoms.

Altogether I saw sixty cases, some of them having recovered entirely, some convalescent. Fifteen developed the disease during the time from February 25th to March 12th. The history was alike in all cases.

I have no doubt that at least a certain number of those occurring last fall were of true malarial origin, especially so since the conditions in the vicinity of Young America are such that malaria might be present to some extent.

Dr. B. W. Egan of Carroll, Indiana, a small town near Young America, informed me that he had a patient in February, who, in the doctor's opinion, was suffering from a true malaria (no blood examination made).

As to the cases developed during my stay at Young America, I did not feel justified in pronouncing them either malaria or influenza before I had carefully examined all the blood specimens from these cases. This, however, was impossible under the conditions obtaining, and I reserved that part of the work until after my return to the Laboratory of Hygiene.

The presence of influenza bacilli in nose and throat of these patients would have made very little difference in my opinion, as, from the results of sputum examination in the Laboratory of Hygiene, I infer that Pfeiffer's bacillus is at present found in nearly every case of catarrhal condition affecting the upper air passages.

Under ordinary circumstances, I should have had no hesitation in suggesting the possibility of influenza, but as the professional discontent here was greater than I have ever experienced anywhere, and besides disseminating many untrue rumors about statements I was alleged to have made—one physician going so far as to secure the aid of a third person to get from me a confidential statement of my opinion regarding the situation—I thought it the best policy to withhold my opinion entirely, stating that the State Board of Health would probably inform Dr. Marshall as to their conclusion in the matter, if they should think fit to do so. This kind of procedure may not be what is expected of me, but I beg to be permitted to say that I believe it served to the best advantage in the situation as I saw it.

It has been my constant endeavor to avoid such actions as might be construed as if I favored any of the parties concerned, at the same time trying to do all that was possible for the interest of the patients and to maintain the dignity of an employe of the State Board of Health.

Respectfully,

HELENE KNABE, M. D.

The secretary announced that the term of Dr. M. M. Haas, of Evansville, expired June 1, 1907, as a member of the State Board of Dental Examiners, and that it was the duty of the Board of Health to elect his successor.

Dr. Tucker moved that Dr. M. M. Haas be elected a member of the State Board of Dental Examiners for the two years term beginning June 1, 1907. Seconded by Dr. Wishard.

Unanimously carried.

Ordered, that the Annual Conference of Health Officers be held for one day, May 21st, 1907, and that the secretary prepare a program.

Ordered, that Drs. Tucker and McCoy act as delegates from the Board to attend the annual meeting of the National Tuberculosis Association, which will be held May 6-7-8, 1907, in Washington, D. C.

Ordered, that the secretary go as a delegate of the Board to the annual conference of State and Provincial Boards of Health.

After discussion, the following rule was unanimously adopted:

RULE IN REGARD TO THE DISPLAY FOR THE PURPOSE OF SALE OF FOOD PRODUCTS UNLESS PROPERLY PROTECTED.

Rule.—“No manufacturer, dealer, vender or other person shall expose for sale or exchange, or sell, any bread, pastry, confectionery, shelled nuts, or other food so prepared that it is ready for consumption, unless such food is properly protected from insects, dust, dirt and other foreign or unwholesome material by suitable coverings.”

SPECIAL MEETING INDIANA STATE BOARD OF HEALTH.

MAY 21, 1907.

Called to order by President Tucker at 1 p. m. Present: Drs. Tucker, McCoy, Davis, Hurty.

President Tucker announced the object of the special meeting was to consider affairs concerning the annual health officers' school and to act upon such matters as might be brought before the Board.

The secretary announced the attendance at the conference to be 276. Sixty-eight counties, 110 cities and 164 towns were represented.

According to the resolution of the State Board, the meeting was for only one day, with morning, afternoon and evening sessions. The program was as follows:

FIRST SESSION.

Tuesday, May 21, 1907, 10:00 a. m.

Called to order by F. A. Tucker, President.

Address—"The Health Officer and Public Charity Work."

Mr. Amos W. Butler, Secretary Board of State Charities.

Paper—"The Sanitary Disposal of Garbage and Night-soil in Small Towns."

Dr. George Lake, Health Officer, Wolcottville.

SECOND SESSION.

2:00 p. m.

"The Preparation and Standardization of Diphtheria Antitoxin."

C. S. McKee, Chicago Memorial Institute for Infectious Diseases.

"Streptococcus Infection in Diphtheria."

Hugh A. Cowing, Health Officer Delaware County.

Discussion—Opened by H. R. Spickerman, Health Officer, Muncie.

"How the Bacteriological and Pathological Laboratory Can Help Physicians in the Cure and Prevention of Disease."

J. B. Rucker, Jr., Superintendent State Laboratory of Hygiene.

THIRD SESSION.

8:00 p. m.

"A Review of the New Laws Pertaining to the Public Health."

J. N. Hurty, Secretary State Board Health.

KEMPTON, TIPTON COUNTY, IND.—INSPECTION OF SCHOOL HOUSE, DISTRICT No. 3, May 1, 1907.

Site.—The building is situated in the southern part of the town, just outside of the corporation. The plat of ground upon which it is situated is somewhat higher than the surrounding territory and could be properly drained. The yard contains about two acres and is well sodded. The water supply comes from a dug well and every opportunity is afforded for surface water to drain into it.

Approaches.—There are two walks leading to the building. The one to the west entrance is of brick and is in fair condition. The one to the east entrance is part of cinders and part of boards. There are no walks to the outhouses.

Outhouses.—The outhouses are in bad condition, being worn and filthy and affording no privacy for individual pupils.

Building.—The building is a two-story brick with a slate roof and a

brick foundation. There are two layers of limestone laid in the walls at the ground surface. The floors are not elevated much more than the ground surface. The building consists of a very old part containing four rooms, two above and two below, and a new addition, built in 1901, containing one main room on each floor, with small recitation, cloak and storage rooms communicating with each, and a large hallway on each floor, which connects the rooms of the old and the new parts. The walls of the old part are cracked in many places and are stayed by iron or steel rods passing from the west to the east walls. Those rods are four in number, and are about $1\frac{1}{2}$ inches by two inches in diameter. The water spout from the roof down the south wall of the building is gone and the wall is watersoaked outside and inside.

The roof is in bad condition. The ceilings of the upper rooms in the old part and the ceiling of the upper hall in the new part are much damaged by leakage.

Basement.—The basement is located in the northeast corner of the new part under the primary room. It is 25 by 31 feet and is 8 feet deep. It has a dirt floor. The boiler for the hot-water heating plant and the coal room are located in the basement. The basement is not well drained and water lines on its walls show that the water has risen as high as four feet. The janitor says that the fires have been put out several times, that the school has been dismissed for a week at a time and that it is not an uncommon thing for him to have to use rubber boots to wade in the basement when attending to the fire. He attributes the above condition to the back water of a tile drain.

Ventilation.—There are no means of ventilation except by the windows and doors.

Heating.—The building is heated by a hot water system. There are two radiators placed along the rear walls of each room. On the lower floor, water pipes 5 inches in diameter run along the baseboards to the registers and small pipes 2 or 3 inches in diameter lead from these pipes to the radiators on the upper floors. The janitor says that in cold weather it is impossible to get the rooms warm.

Stairways.—The stairways lead from each end of the lower hall and wind about and come to the same landing in the upper hall. This landing is about 4x6 feet. There would be great danger in case of fire, as this landing is the only exit for over one hundred pupils.

Primary Room.—The primary room is located on the first floor of the new part, just over the basement. It is 25x30 feet in area. It is lighted by six windows, each 3x7 feet. Three are in the north wall and three are in the east wall. This room seats thirty pupils. To the west of the room are two small rooms, each 12x12 feet, used for cloak and storage rooms.

High School Room.—This is situated just above the primary room and is a duplicate of it, except that instead of there being two rooms west of it, all the space is thrown into one room and used for the recitation of classes. The high school room seats thirty pupils.

Room of Second and Third Grades.—This room is located in the east end of the old part on the first floor. It is 36 feet by 26 feet in area and

is lighted by six windows, four in the east wall and two in the south wall, each being 3x7 feet. There are thirty-six pupils in this room.

Room of Sixth and Seventh Grades.—This room is located just above the one just described and is a duplicate. It seats thirty-six pupils.

Room of Fourth and Fifth Grades.—This room is located in the west part of the old part, on the first floor. It is 36x26 feet in area and is lighted by six windows, two in the south wall and four in the west wall, each being 3x7 feet. This room seats thirty-eight pupils.

Room of Eighth Grade.—This room is situated just above the one last described and is a duplicate of it. It seats forty-six pupils.

After a full consideration of the above report of inspection, the following was unanimously adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health in special session at Indianapolis, May 21, 1907, that the school house at Kempton, Tipton County, Indiana, is old, dilapidated, insufficiently ventilated, improperly lighted, unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils; therefore, it is

Ordered, That the said school house is formally condemned for school purposes and shall not be used for said purposes after June 1, 1907.

Any school trustee, township trustees, or school teacher or other person who may use said school house for school purposes after June 1, 1907, shall be promptly prosecuted, as by the statutes provided.

BRINGHURST, IND., INSPECTION OF SCHOOL HOUSE, DISTRICT No. 3, MAY 2, 1907.

Site.—The building is located in the southeast part of the town. It is located upon a rather high plat of ground, it being a very suitable location from a sanitary point of view. The plat contains about an acre of ground. It is well sodded and there is a good driven well located in the front part of the plat.

Approaches.—Board walks lead to the building, but there are no walks to the outhouses.

Outhouses.—The outhouses are in bad condition and are unsanitary.

Building.—The building is a two-story brick structure with a stone foundation and a shingle roof. The waterspouts are broken and the walls badly water-soaked. The lower floor is just above the ground surface. The building is built in a T shape, as shown in drawings. There are four rooms and four hallways. Two rooms are in the foot of the T and two in the head. The building faces the north. The north wall is badly cracked from the top almost to the bottom, and one may look through this crack from the inside of the building and see the town of Flora, some two miles distant. The walls of this part are stayed by iron or steel rods running from the east to the west wall. There are cracks in other walls of the building through which one may see. The walls of the building are in a dangerous condition.

Ventilation.—There are no means of ventilation except by the windows, doors and cracks through the walls.

Heating.—The building is heated by means of stoves placed near the centers of the various rooms.

General Condition of Interior.—The ceilings and walls are cracked and great patches of plastering and paper are gone. The floors are, of course, rough material and are uneven, shaky and dangerous. The floors, walls and ceilings are filthy, and unsanitary beyond description.

Room of Primary Grades, 1, 2, 3, 4.—This room is located on the lower floor of the north end of the building. It is 30x32 feet and is lighted by six windows, three in each side wall, each window being 3x7 feet. There are forty-six pupils enrolled in this room.

Room of Fifth and Sixth Grades.—This room is located on the lower floor in the south part of the building. It is 26x30 feet and is lighted by three windows, each 3x7 feet, in the south wall, and one window 3x7 feet in the north wall of the T-projection. Lamps have been used in this room during school hours for the children to see to study. Forty pupils are enrolled in this room.

Room of Seventh and Eighth Grades.—A winding stairway 4 feet wide leads from the lower front hall to the upper front hall and from this hall the room is entered. The room is a counterpart of the primary room below. Its floors are unstable and unsafe. There are thirty-eight pupils enrolled in this room.

Room of High School.—This room is located on the upper floor of the south part of the building. A winding stairway, 4 feet wide, leads from the lower west hall to the upper west hall, and from this hall the high school room is entered. This room is like the room of the fifth and sixth grades just below it, except that it has three windows each 3x7 feet in the east wall in addition to the three in the south wall and the one in the north wall. Thirty enrolled.

Conclusion.—The above-described building is totally unfit for school purposes and should be condemned.

After full consideration of the above report of sanitary survey, the following was unanimously adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in special session at Indianapolis, May 21, 1907, that the school house at Brighthurst, Indiana, Carroll County, District No. 3, is old, dilapidated, insufficiently ventilated, improperly lighted, unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils; therefore, it is

Ordered, That the said school house is formally condemned for school purposes and shall not be used for said purposes after June 1, 1907. Any school trustee, township trustees, or school teacher or other person who may use said school house for school purposes, after June 1, 1907, shall be promptly prosecuted as by the statutes provided.

BURROWS, CARROLL COUNTY, INDIANA, INSPECTION OF SCHOOL HOUSE, DISTRICT No. 2, MAY 2, 1907.

Site.—The building is located in the northeastern part of the town. The plat contains about eight town lots. The plat is well drained and the yard is well sodded. The south end of the plat is about two hundred and fifty feet from the railroad. This site has been condemned by the County Board of Health on account of its nearness to the railroad.

Approaches.—There are no approaches to the building or outhouses.

Building.—The building is a two-story brick with a shingle roof. The building faces the west. The east wall is cracked. The building is stayed by rods running from the north to the south walls. The lower floor is not far above the ground surface.

Ventilation.—There are no means of ventilation except by the windows and doors.

Heating.—The rooms are heated by means of stoves placed in the centers of the respective rooms.

Halls.—There are two halls, one below and one above, situated at the front end of the building. These halls extend the entire width of the building and are about ten feet wide.

Stairways.—Two stairways lead from the lower hall to the upper hall. They are about four feet wide. They are located at each end of the hall and wind about to reach the upper hall.

Lower Room.—This room is 40x30 feet. It is lighted by eight windows, each 3x7 feet. There are four in the south wall and four in the north wall. The floors are rough and unsanitary. The walls and ceilings are dirty. Three wooden pillars, 6 inches by 6 inches, run from the floor to the ceiling, to support the floor of the upper room. This room is occupied by the first, second and third grades. The enrollment is thirty-six pupils.

Upper Room.—This room is a duplicate of the lower room. Its walls and ceilings are filthy and unsanitary. Its floor is rough, dirty, sagged and dangerous. This room is occupied by the fourth, fifth and sixth grades. The enrollment is thirty pupils.

Seventh, Eighth and High School.—This part of the school is carried on in a wooden store building, formerly used for implements. It contains an upper and lower room. It is a long, low building, like the usual wooden country store building. Access could not be gained to it, but from what could be seen from the outside it is totally unfit for school purposes.

Remarks.—The trustee says he has tried and is trying to erect a new modern building; his plans are frustrated by the advisory board, all of whom live in the other end of the township, some five and a half miles away.

The building should be condemned.

After full consideration of the above report of sanitary survey, the following was unanimously adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in special session, at Indianapolis, May 21, 1907, that the schoolhouse at Burrows, Carroll County, Indiana, District No. 2, is old,

dilapidated, insufficiently ventilated, improperly lighted, unevenly warmed, and otherwise unsanitary, so as to threaten the health and lives of the pupils; therefore, it is

Ordered, That the said schoolhouse is formally condemned for school purposes and shall not be used for said purpose after June 1, 1907. Any school trustee, township trustees, or school teacher or other person, who may use said schoolhouse for school purposes, after June 1, 1907, shall be promptly prosecuted as by the statutes provided.

INSPECTION OF SCHOOL HOUSE, JAMESTOWN, BOONE COUNTY, INDIANA.

Site.—The school is located in the northeast part of the town. The plat contains about eight town lots. It is very high and dry. It is well drained and well sodded and contains sufficient trees. It is a beautiful and sanitary place for school purposes. The water supply is from a dug well.

Approaches.—Wide cement walks lead from the sidewalk of the street to the building. There are no walks to the outhouses.

Outhouses.—The outhouses are worn, dirty and filthy. They afford no privacy for individual pupils.

Building.—The building is a very old two-story brick, with a brick foundation and a shingle roof. It faces the south and is about eighty-four feet long from north to south and about fifty feet wide from east to west. The walls are stayed by fine, large, iron or steel rods running from the east to the west wall. The wall appears plumb and in good condition. The roof appears old and worn, but there is no indication of leakage except around the belfry.

Basement.—There is a basement under the northeast corner of the building in which is located the coal room and boiler. Entrance could not be gained to it, but the principal of the school says it is cemented and is dry.

Heating.—The building is heated by direct steam heat. There are two radiators in each of the four south rooms and three in each of the four north rooms.

Ventilation.—Ventilation is carried on by a gravity system of very poor quality and by the windows and doors.

Hallways.—There are two main hallways, one on the lower and one on the upper floor, running from the west to the east of the building and near its center north and south. These hallways are each eight feet in width. On the upper floor a branch hall six feet wide leads from the center of the main hall to the south front of the building. There is an entrance hall, 12 feet by 24 feet, and one story high, built at the south entrance of the building and leading into the two lower south rooms. There is also an entrance hall, 12 feet by 24 feet and one story high, built at the west entrance of the building and leading into the lower main hall.

Stairways.—There is one winding stairway, three feet wide, leading from the east end of the lower main hall to the east end of the upper main hall. This would be inadequate in case of fire.

Floors.—The floors are splintered, rough and dirty.

Walls and Ceilings.—The walls and ceilings are filthy and unsanitary, except the high-school room, which has a nicely-painted steel ceiling.

Primary Room.—This room is located on the lower floor, in the southeast corner of the building. It is 24 feet by 34 feet in area. It is lighted by four windows, each 3 feet by 8 feet. One window is in the south wall and three in the east wall. This room contains forty pupils. It has two entrances, one into the south entrance hall and one into the lower main hall.

First and Second Grade Room.—This room is located on the lower floor, in the northeast corner of the building. It is 24 feet by 42 feet in area. It is lighted by six windows, each 3 feet by 8 feet. Two are in the north wall and four in the east wall. There are forty pupils in this room.

Third and Fourth Grade Room.—This room is located on the lower floor, in the northwest corner of the building. It is 24 feet by 42 feet in area. It is lighted by six windows, each 3 feet by 8 feet. Two are in the north wall and four are in the west wall. There are forty pupils in this room.

Fifth and Sixth Grade Room.—This room is located on the lower floor, in the southwest corner of the building. It is 24 feet by 34 feet in area. It is lighted by four windows, each 3 feet by 8 feet. One is in the south and three in the west wall. There are forty-five pupils in this room.

Seventh and Eighth Grade Room.—This room is located on the upper floor in the southeast corner of the building. It is 21 feet by 34 feet in area. It is lighted by five windows, each 3 feet by 8 feet. Two are in the south wall and three are in the east wall. This room has thirty-six pupils enrolled.

High School and Assembly Room.—This room is located on the upper floor in the north end of the building. It is 48 feet by 42 feet in area. It is lighted by twelve windows, each 3 feet by 8 feet. There are four windows in the east, west and north walls respectively. This room may be separated into two rooms by sliding doors, making an east and a west room. Forty pupils are seated in the east room.

High School Recitation Room.—This room is located on the upper floor in the southwest corner of the building. It is 21 feet by 34 feet in area. It is lighted by five windows, each 3 feet by 8 feet. Two are in the south wall and three are in the west wall.

Remarks.—The trustee is building a modern new building in his township at Advance, Ind. He has issued twenty thousand dollars' worth of bonds to enable him to build. This leaves him in such a financial condition that it would be difficult for him to build at Jamestown.

Recommendations.—It is respectfully recommended that he be allowed to continue to use the building at Jamestown until such a time as he is in financial condition to erect a modern building, but not until he has complied with the following suggestions:

The outhouses should be repaired, made sanitary, and provided for individual privacy.

The floors, walls and ceilings should be repaired, cleaned and made sanitary and presentable.

Fresh air pipes should be placed in the windows over each steam radiator.

The entrances to the foul air shafts should be enlarged and properly placed.

Another story should be added to the south entrance hall and a wide stairway run from the lower floor of it to the upper floor and a connection made with the upper branch hall. This would lessen danger in case of fire.

After full consideration of the above report of sanitary survey, the following was adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in special session at Indianapolis, May 21, 1907, that the school house at Jamestown, Boone County, Indiana, is old, dilapidated, insufficiently ventilated, improperly lighted, unevenly warmed, and otherwise unsanitary, so as to threaten the health and lives of the pupils; therefore, it is

Ordered, That the said school house is formally condemned for school purposes after June 1, 1907. Any school trustee, township trustees, or school teacher or other person who may use said school house for school purposes, after June 1, 1907, shall be promptly prosecuted as by the statutes provided.

INSPECTION OF SCHOOLHOUSE AT KIRKLIN, CLINTON COUNTY, IND., MAY 6, 1907.

Site.—The school is located in the northwestern part of the town. The plat contains eight town lots. It is well drained. The playground is covered with a good sod. A good driven well, one hundred and twenty feet in depth, is located in the front end of the grounds.

Approaches.—There is a wide cement walk leading from the street to the building.

Building.—The building is a very old, two-story brick, with a stone foundation and a shingle roof. It consists of an original building and an addition joined onto it. The lower floors are flush with the ground surface. The downspouts are broken and the walls are watersoaked. The walls are cracked and the addition is drawn away from the original building. One may see daylight through these cracks. The walls are not held together with rods. They are dangerous. There are seven rooms in the building, four on the lower floor and three on the upper. There is no basement to the building.

Heating.—The building is heated by means of stoves in the several rooms.

Ventilation.—There is no means of ventilation except by the windows, doors and cracks in the walls.

Hallways.—There are three hallways. Two are in the original building, one above and one below. They are each twelve feet wide and run

through the center of the building from east to west. The third is on the lower floor of the addition and runs north from the east end of the main hall. It is eight feet wide. These halls serve as cloakrooms.

Stairways.—Two winding stairs run from the lower main hall to the upper main hall. These stairways are only three feet wide and would be very dangerous in case of fire.

Floors.—The floors of the building are old, cracked, dirty and cannot be made sanitary. They are also weak and the upper ones are dangerously shaky and sagged.

Primary Room.—The room is located on the lower floor, in the south part of the addition. It is 24x34 feet in area. It is lighted by five windows, each 3 feet by 7 feet. Three are in the south wall and two in the east wall. There are fifty-nine pupils enrolled in this room. This gives an air space of about 150 cubic feet to each pupil, and with a big stove in the room and no means of ventilation, presents a very bad condition of affairs, which is duplicated in other rooms of the building.

Seventh and Eighth Grade Room.—This room is located on the lower floor in the north part of the addition. It is 23 feet by 34 feet in area. It is lighted by five windows; three are in the north wall and two in the east wall. There are forty pupils enrolled in this room.

Chapel.—The chapel is located just above the primary and eighth grade room and hall of the addition. It is 42 feet by 48 feet in area. It is lighted by eleven windows, each 3 feet by 7 feet. Two are in the south wall, four in the east wall and one in the west wall. The floor is unstable. The walls are badly cracked and admit rays of light. The ceiling is cracked and sagged. It is supported by three wooden pillars along the center of the room and running up from the floor. This part of the building is absolutely dangerous.

Third, Fourth, Fifth and Sixth Grade Room.—This room is located on the lower floor of the original building in the south end. It is 24 feet by 38 feet in area. It is lighted by five windows, each 3 feet by 7 feet. Three are in the south wall and two are in the east wall. Sixty pupils are enrolled in this room. The room just above this one is a duplicate of it, and is used as a recitation and laboratory room for the high school pupils.

Second Grade Room.—This room is located on the second floor of the original building, in the north end. It is 24 feet by 38 feet in area. It is lighted by five windows, each 3 feet by 7 feet. Three are in the north wall and two in the west wall. Fifty-two pupils are enrolled in this room.

High School Room.—This is located just above the second grade room and is a duplicate of it. Forty-four pupils are enrolled in this room.

Remarks.—This is one of the richest communities in Indiana. They are amply able to erect a modern building. The school board is willing to erect a new building. The present building is totally unfit for school purposes.

Recommendations.—It is respectfully recommended that the building be condemned.

After full consideration of the above report of sanitary survey, the following was unanimously adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in special session at Indianapolis, May 21st, 1907, that the school house at Kirklin, Clinton County, Indiana, is old, dilapidated, insufficiently ventilated, improperly lighted, unevenly warmed and otherwise unsanitary so as to threaten the health and lives of the pupils, therefore, it is

Ordered, That the said schoolhouse is formally condemned for school purposes and shall not be used for said purposes after June 1st, 1907. Any school trustee, township trustees, or school teacher or other person who may use said schoolhouse for school purposes, after June 1st, 1907, shall be promptly prosecuted as by the statutes provided.

INSPECTION OF SCHOOLHOUSE, DISTRICT No. 10, SHARPSVILLE,
TIPTON COUNTY, INDIANA, MAY 8, 1907.

Site.—The school is located in the south part of the town. The plat of ground contains eight town lots. It is well drained and sodded and there is a good supply of trees.

Approaches.—The approaches are by gravel walks. There are no walks to the outhouses. The outhouses are worn and dirty.

Building.—The building is a two-story brick, with a stone foundation and a slate roof. The first floor is about two and one-half feet above the ground surface. There is no basement under the building. The walls appear to be plumb and safe. The downspout at the southeast corner of the building is broken and the walls at that point are watersoaked. The building faces the north and is a fair looking building.

Heating.—The building is heated by means of stoves in the several rooms. These stoves are each surrounded by a jacket.

Ventilation.—The building is ventilated by means of foul air ducts built in the chimneys at each side of the building and by means of fresh air pipes fitted in the window casements.

Floors.—The floors of the building are in fair condition.

Walls and Ceilings.—The walls and ceilings are in an unsanitary condition.

Hallways.—There are two hallways, one below and one above. The area of each is 14 feet by 15 feet. There are two cloakrooms, each 5 feet by 15 feet, on each side of each hall.

Stairways.—The stairway starts within three feet of the main entrance to the building. It is five feet wide and runs up the center of the lower hall to a landing two and one-half feet wide, and from this landing a winding stairs two and one-half feet wide, leads on each side to the hall above. These stairs would be regular death traps in case of fire.

First and Second Grade Room.—This room is located on the first floor in the east end of the building. It is 26 feet by 36 feet in area. It is lighted by seven windows, each 3 feet by 8 feet. One is in the north wall, four in the east wall and two in the south wall. Fifty-one pupils are enrolled in this room.

Third, Fourth and Fifth Grades Room.—This room is located on the lower floor in the west end of the building. It is 26 feet by 36 feet in area.

It is lighted by seven windows, each 3 feet by 7 feet. One is in the north wall, four in the west wall and two in the south wall. There are fifty-six pupils enrolled in this room.

Sixth, Seventh and Eighth Grades Room.—This room is located on the upper floor, in the west end of the building. It is 26 feet by 25½ feet in area. It is lighted by four windows, each 3 feet by 8 feet. One is in the north wall and three in the west wall.

Recitation Room.—This room is on the same floor and just south of the one just described, and was formerly a part of it. It is 10 feet by 26 feet in area. It is lighted by three windows, each 3 feet by 8 feet. One is in the west wall and two are in the south wall.

High School Room.—This room is located on the upper floor, in the east end of the building. It is 26 feet by 36 feet in area. It is lighted by seven windows, each 3 feet by 8 feet. Two are in the south wall, four in the west wall, and one in the north wall. Forty-three pupils are enrolled in this room.

Remarks.—This building was condemned one or two years ago by the Board, but permission was given to carry on school in it after some suggestions of the Board had been carried out. This building can, with some little expense, be made very suitable for school purposes.

Recommendations.—It is respectfully recommended that the building be condemned unless the trustees comply with the following suggestions and any others the Board may see fit to make.

An approved system of heating and ventilating should be installed. The building is in such condition that this can be done without great difficulty or outlay.

The hallways, cloakrooms and stairway should be remodeled so as to provide for two wide stairways and ample means of exit. The partitions in this part are of wood and this work can be done at a cost not to exceed two hundred dollars.

After full consideration of the above report of sanitary survey, the following was adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in special session at Indianapolis, May 21st, 1907, that the schoolhouse at Sharpsville, Tipton County, Indiana, is old, dilapidated, insufficiently ventilated, improperly lighted, unevenly warmed, and otherwise unsanitary, so as to threaten the health and lives of the pupils, therefore it is

Ordered, That the said schoolhouse is formally condemned for school purposes and shall not be used for said purposes after June 1st, 1907. Any school trustee, township trustees, or school teacher or other person who may use said schoolhouse for school purposes, after June 1st, 1907, shall be promptly prosecuted as by the statutes provided.

INSPECTION OF SCHOOL HOUSE AT NEW BRUNSWICK, HARRISON
TOWNSHIP, BOONE COUNTY, INDIANA, DISTRICT No. 4,
MAY 9, 1907.

Site.—This school is located near a cross roads. The plat contains about one acre. The yard is sodded. There are no approaches except a few boards from the front of the building to the road.

Building.—The building is a one-story brick containing one room. Its walls are cracked and dangerous. Its area is 24 feet by 32 feet. It is lighted by six windows, three in the east wall and three in the west wall. Each of the windows are 3 feet by 7 feet.

Heating.—The room is heated by two large stoves, one on each side.

Ventilation.—The windows and doors are the only means of ventilation.

Floor.—The floor is rough, splintered and dirty.

Walls.—The walls are rough, dirty and dreary looking.

Ceiling.—The ceiling is patched, dirty and low.

Remarks.—The room seats fifty pupils. The desks are old double ones. It is a dangerous and unsanitary place for school purposes. Many barns in the neighborhood would answer the purpose better.

Recommendations.—It is respectfully recommended that the building be condemned.

After full consideration of the above report of sanitary survey, the following was adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in special session at Indianapolis, May 21st, 1907, that the schoolhouse at New Brunswick, Harrison Township, Boone County, Indiana, District No. 4, is old, dilapidated, insufficiently ventilated, improperly lighted, unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils, therefore it is

Ordered, That the said schoolhouse is formally condemned for school purposes and shall not be used for said purposes after June 1st, 1907. Any school trustee, township trustees, or school teacher or other person who may use said schoolhouse for school purposes after June 1st, 1907, shall be promptly prosecuted as by the statutes provided.

SANITARY SURVEY OF SCHOOLHOUSE AT ROLL, IND., MAY 12, 1907.

(By Dr. W. N. Cronin, Health Officer, Blackford County.)

Location.—The schoolhouse at Roll, Ind., is in Blackford County, Washington Township, and known as District No. 2. Mr. Isaac R. Harold, Trustee. Address, Roll, Ind.

Site.—The site is dry, covers about one acre; there is one four-inch tile drain and no shade. This site is unobjectionable.

Building.—The school building was built in 1893; it is brick, one story, two rooms, stone foundation, no basement. The walls on two sides are crumbling at one corner, downspout broken, leaks and makes walls damp. Both rooms are heated by stoves and the only ventilation is by windows and

doors; both rooms are wrongly lighted. In one room the children look into the light and in the other the teacher looks into the light. Hooks are fastened in the walls of the cold hall for disposal of wraps. Every school session the children have coughs, colds and catarrhs. Eye strain has existed in one or two instances.

Recommendations.—It is recommended that this schoolhouse be condemned as unfit for school purposes.

After full consideration of the above report of sanitary survey, the following was adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health that the schoolhouse at Roll, Washington Township, District No. 2, Blackford County, Indiana, is old, dilapidated, has damp walls, is insufficiently ventilated, improperly lighted, improperly and unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils, therefore it is

Ordered, That the said schoolhouse is formally condemned for school purposes and shall not be used for said purposes after June 1st, 1907. Any school trustee, township trustees, or school teacher or other person who may use said schoolhouse for school purposes, after June 1st, 1907, shall be promptly prosecuted as by the statutes provided.

INSPECTION OF SCHOOLHOUSE AT MONROVIA, MORGAN COUNTY, INDIANA, MAY 13, 1907.

Site.—The school is located in the south part of the town. The plat contains eight town lots. It is high and well drained. The yard is of gravel and sod. The water supply is from a driven well, located in the front of the plat. The site for school purposes is good.

Approaches.—There are gravel walks leading to the building, but there are no walks to the outhouses.

Outhouses. The outhouses are old, worn, filthy and unsanitary. They afford no privacy for the pupils.

Building.—The building is a two-story brick, containing six rooms. It has a brick foundation and a tin roof. The two west rooms are an addition to the original building. This part has settled, and where it is joined on to the original building there are cracks. However, there seems to be no danger of the building collapsing. The various walls are stayed by iron or steel rods running to the opposite walls.

The downspouts are broken and the walls are watersoaked. Water runs from these downspouts under the floors. There is no basement under the building. The walls inside show evidence of "sweating" and dampness.

Heating.—The respective rooms are heated by large stoves.

Ventilation.—There are no means of ventilation except by the windows and doors.

Hallways.—There are two entrance hallways on the lower floor, one 12 feet by 18 feet at the front of the building, and one 8 feet wide running between the original building and the addition. On the upper floor is an

upper hall corresponding to the lower front hall, a hall corresponding to the lower hall connecting the original building and addition, and also a hall eight feet wide running through the center of the original building and connecting these two halls.

Stairways.—There are two winding stairways leading from each side of the lower front entrance hall to the upper. These stairways are very steep and are only two and a half feet wide. They would be very dangerous in case of fire.

General Conditions.—The floors, walls and ceilings are in bad condition, being dirty and unsanitary. Paper and plastering is loose in places. The floors are rough and uneven.

Primary Room 1 and 2.—This room is located in the west part of the building, being on the lower floor of the addition. It is 25 feet by 26 feet in area. It is lighted by eight windows, each 3 feet by 7 feet. There are two windows in the west wall and three in each of the north and south walls. A large wooden pillar in the center of the room runs from the floor to support the ceiling. There are thirty-nine pupils in this room.

Seventh and Eighth Grade Room.—This room is located just above the primary room and is a duplicate of it, except the wooden pillar in the center. There are thirty-four pupils in this room.

Fifth and Sixth Grade Room.—This room is located on the lower floor in the south part of the original building. Its area is 26 feet by 31 feet. It is lighted by six windows, each 3 feet by 7 feet. Two are in each, the east, south and west walls respectively. A large wooden pillar in the center of the room runs from the floor to support the ceiling and upper floor. There are thirty-five pupils in this room.

Third and Fourth Grade Room.—This room is located on the lower floor in the north part of the original building. It is 26 feet by 31 feet in area. It is lighted by six windows, each 3 feet by 7 feet. Two are in each, the west, north and east walls, respectively. There are twenty-five pupils in this room.

First and Second Year High School Room.—This room is located on the upper floor in the south part of the original building. It is 26 feet by 27 feet in area. It is lighted by six windows, each 3 feet by 7 feet. Two are in each, the east, south and west walls, respectively. There are twenty-two pupils in this room.

Third and Fourth Year High School Room.—This room is located on the upper floor in the north part of the original building. It is lighted by six windows, each 3 feet by 7 feet. Two are in each, the east, north and west walls. There are thirty-nine pupils in this room.

Remarks.—The trustee and advisory board, while seeing the need of a new building, do not wish to build one now. They say the township has voted twenty thousand dollars for new roads and give this as their excuse for not wishing to build.

The indebtedness of the township is about three thousand dollars (\$3,000). Special levy is 30 cents; tuition levy, 25 cents; road levy is 10 cents cash and 15 cents labor.

Recommendations.—It is respectfully recommended that the building be condemned.

After full consideration of the above report of sanitary survey, the following was adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in special session at Indianapolis, May 21st, 1907, that the schoolhouse at Monrovia, Morgan County, Indiana, is old, dilapidated, insufficiently ventilated, improperly lighted, unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils, therefore it is

Ordered, That the said schoolhouse is formally condemned for school purposes and shall not be used for said purposes after June 1st, 1907. Any school trustee, township trustees, or school teacher or other person who may use said schoolhouse for school purposes after June 1st, 1907, shall be promptly prosecuted as by the statutes provided.

INSPECTION OF SCHOOLHOUSE AT MORGANTOWN, MORGAN COUNTY, INDIANA, MAY 14, 1907.

Site.—The school is located in the south part of the town. The plat contains four lots. It is dry and well drained. The yard is graveled and sodded.

Approaches.—Gravel walks lead to the building. There are no walks to the outhouses.

Outhouses.—The outhouses are worn, filthy and unsanitary. No privacy is afforded.

Building.—The building is a two-story brick, containing four rooms and an upper and lower entrance hall. The foundation is of brick with a layer of stone at the ground surface. The roof is of slate. There is no basement to the building. The downspouts are broken and the walls are water-soaked. The west wall is badly cracked from top to bottom and is in a dangerous condition.

Heating.—The rooms of the building are heated by stoves placed in the rear of the respective rooms.

Ventilation.—There are no means of ventilation, except by the windows and doors.

Hallways.—There are two entrance halls, one on the lower and on the upper floor. Each hall is eight feet wide and thirty-eight feet long.

Stairways.—There are two stairways, each three and one-half feet wide, leading from the lower to the upper floor.

General Conditions.—The floors, walls and ceilings of the building are in a bad state of repair and are dirty and unsanitary. Patches of plastering are missing. The rooms are separated on each floor by wooden partitions and in the upper are sliding doors.

Primary Room 1 and 2.—This room is located in the lower north part of the building. It is 19 feet by 49 feet in area. It is lighted by five windows, each 3 feet by 8 feet. Four of them are in the north wall and one is in the west wall. There are forty-six pupils in this room.

Intermediate Room 3, 4 and 5.—This room is located on the lower floor in the south part of the building. It is 19 feet by 49 feet in area. It is lighted by five windows, each 3 feet by 8 feet. Four are in the south wall and one is in the west wall. There are fifty-four pupils in this room.

Sixth and Seventh Grade.—These pupils are taught in an old church building located a short distance from the schoolhouse.

Eighth Grade Room.—This room is located just above the intermediate room and is a duplicate of it. There are forty pupils in this room.

High School Room.—This room is located just above the primary room and is a duplicate of it. Thirty pupils are enrolled in this room.

Sunnuary.—The building is dangerous to life and its unsanitary condition is a menace to health. The rooms are overcrowded, poorly lighted, heated and ventilated.

Recommendations.—It is respectfully recommended that the building be condemned.

After full consideration of the above report of sanitary survey, the following was adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in special session at Indianapolis, May 21st, 1907, that the schoolhouse at Morgantown, Morgan County, Indiana, is old, dilapidated, insufficiently ventilated, unevenly warmed, and otherwise unsanitary, so as to threaten the health and lives of the pupils; therefore, it is

Ordered That the said schoolhouse is formally condemned for school purposes and shall not be used for said purposes after June 1st, 1907. Any school trustee, township trustees, or school teacher or other person who may use said schoolhouse for school purposes, after June 1st, 1907, shall be promptly prosecuted as by the statutes provided.

INSPECTION OF SCHOOLHOUSE AT VEEDERSBURG, FOUNTAIN COUNTY, INDIANA, MAY 18, 1907.

Site.—This school is situated in the north part of the town. The plat contains about four town lots. It is high and well drained. The playground is of gravel and sod. The site is a good one for school purposes.

Building.—The building is a very old wooden structure, with a foundation partly of brick and partly of stone. It has a shingle roof. It is a two-story building. Only the lower part containing two rooms is used for school purposes. There is what is called a basement under the building. This basement consists of an irregular hole, in which a furnace was at one time installed. The "basement" is dirty and foul smelling, and resembles a trash dump. Water stands in this hole most of the time, as there is no drain from it. The condition of the "basement" is a menace to the health of the pupils. There is no ceiling to the basement and so the floors of the rooms must be very cold in the cold weather.

Heating.—The rooms are heated, or aimed to be, by stoves.

Ventilation.—There are no means of ventilation except by the windows.

Fifth Grade Room.—This room is located in the east part of the lower

story. It is 23 feet by 31 feet in area. It is lighted by four windows, each $2\frac{1}{2}$ feet by 8 feet. One window is in the south wall, one in the north wall and two are in the east wall. The walls, floors and ceilings are in bad condition, being damaged and dirty. The room is very crowded, containing fifty pupils.

Sixth Grade Room.—This room is located in the lower part of the building and on the west side. It is 23 feet by 31 feet in area. It is lighted by four windows, each $2\frac{1}{2}$ feet by 8 feet. One is in the south wall, one is in the north wall and two are in the west wall. There are fifty-one pupils in this room. The walls, floor and ceiling are in bad repair.

Entrance Hall.—The entrance hall is 19 feet by 13 feet in area. Most of its space is taken up by badly constructed "system" of stairways.

Upper Floor.—This is not used for school purposes, but for a band hall.

Remarks.—Physicians state that the pupils of this school were especially afflicted with sickness of various kinds during the past year. School authorities assert that the standard of the pupils is below par and attribute it entirely to the unsanitary condition of the building.

Recommendations.—It is respectfully and strongly recommended that the building be condemned.

After full consideration of the above report of sanitary survey, the following was adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in special session at Indianapolis, May 21st, 1907, that the schoolhouse at Veedersburg, Fountain County, Indiana, is old, dilapidated, insufficiently ventilated, improperly lighted, unevenly warmed and otherwise unsanitary so as to threaten the health and lives of the pupils; therefore, it is

Ordered, That the said schoolhouse is formally condemned for school purposes after June 1st, 1907. Any school trustee, township trustees, or school teacher or other person who may use said schoolhouse for school purposes, after June 1st, 1907, shall be promptly prosecuted as by the statutes provided.

INSPECTION OF SCHOOLHOUSE AT FILLMORE, PUTNAM COUNTY, INDIANA, MAY 20, 1907.

Site.—The school is located in the south part of the town. The plat contains an acre of ground. It is well sodded and graveled. The yard is well drained. The water supply is from a driven well. The site is a good one for school purposes.

Approaches.—Board walks lead from the gravel road to the building. There are no walks to the outhouses.

Building.—The building is a two-story frame, with a stone foundation and a shingle roof, which is in a leaky condition. The weather boarding is cracked and broken in many places. The building faces the west. It contains two rooms, an upper and lower, and an upper and lower entrance

hall. The building was erected in 1883. It is not a substantial structure and would be in danger of collapse in high winds.

Heating.—The building is heated by a stove in each of the two rooms.

Ventilation.—There are no means of ventilation except by the doors and windows.

Hallways.—The hallways are each 11 feet by 13 feet in area. A stairway two and a half feet wide leads straight up from the lower hall and ends at the door opening into the upper room. A board partition separates the stairway from the rest of the halls. These stairs are very steep and would be very dangerous in case of fire.

Lower Room.—This room is 21 feet by 31 feet in area. It is lighted by six windows, each 3 feet by 7 feet. Two are in each of the north, west, and south walls, respectively.

This room is occupied by the fourth, fifth, sixth and seventh grades. There are thirty pupils in the room. The floors are rough and dirty. The walls and ceilings are unclean and patches of plastering are absent.

Upper Room.—This room is a counterpart of the lower room in all respects except that the floor is shaky and dangerous. This room is occupied by the eighth grade and high school. There are forty pupils enrolled.

First, Second and Third Grades.—These pupils are quartered in a small room in the rear of an implement storehouse.

Recommendations.—It is respectfully recommended that the building be condemned.

After full consideration of the above report of sanitary survey, the following was adopted:

PROCLAMATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in special session, at Indianapolis, May 21st, 1907, that the schoolhouse at Fillmore, Putnam County, Indiana, is old, dilapidated, insufficiently ventilated, improperly lighted, unevenly warmed, and otherwise unsanitary, so as to threaten the health and lives of the pupils; therefore, it is

Ordered, That the said schoolhouse is formally condemned for school purposes, and shall not be used for school purposes after June 1st, 1907. Any school trustee, township trustees, or school teacher or other person who may use said schoolhouse for school purposes after June 1st, 1907, shall be promptly prosecuted as by the statutes provided.

Third Regular Meeting.

REGULAR MEETING INDIANA STATE BOARD OF HEALTH.

JULY 12, 1907.

**AFFAIRS CONSIDERED OF THE FISCAL QUARTER ENDING APRIL 30TH,
AND THE CALENDAR QUARTER ENDING JUNE 30TH, 1907.**

Called to order by President Tucker at 2 p. m. Present: Drs. Tucker; McCoy, Davis, Wishard, Hurty.

Minutes of the last regular meeting and of the special meeting of the 21st read and approved.

REPORT OF SECRETARY FOR CALENDAR QUARTER ENDING JUNE 30, 1907.

The orders of the Board in regard to the schoolhouses condemned at the last regular meeting and the special meeting held May 21st, were duly executed. The proclamations, as adopted, were posted and in every instance new and sanitary schoolhouses will be built, but it seems proper to record that in two instances there have been vigorous protests by those who thought new buildings were not needed.

HEALTH OF THE STATE DURING THE QUARTER.

The statistical tables show the health of the quarter to have been about 2½ per cent. better than in the corresponding period last year. However, measles has prevailed to an extraordinary degree, epidemics being reported from all parts of the state. In Indianapolis five schools have been closed and over 3,000 cases reported, Scarlet fever has also been reported extensively, but the cases have usually been mild. The situation in regard to smallpox and typhoid fever is shown by the following tables:

SMALLPOX COMPARISON FOR SECOND CALENDAR QUARTER.

Date.	Number of Cases Reported.	Number of Deaths.	Number of Counties Invaded.
April, 1906.....	97	.....	11
April, 1907.....	91	1	20
May, 1906.....	112	.....	14
May, 1907.....	149	1	23
June, 1906.....	63	.....	8
June, 1907.....	193	1	31
Total, 1906.....	272	.....	33
Total, 1907.....	433	3	74

TYPHOID FEVER COMPARISON FOR SECOND CALENDAR QUARTER.

Date.	Number of Cases Reported.	Number of Deaths.	Number of Counties Invaded.
April, 1906.....	211	34	62
April, 1907.....	280	38	37
May, 1906.....	94	40	3
May, 1907.....	102	32	32
June, 1906.....	153	29	37
June, 1907.....	142	24	26
Total, 1906.....	305	103	92
Total, 1907.....	524	94	105

VISITS AND INSPECTIONS.

Visits were made as follows:

May 4th—Washington, D. C. To attend National Tuberculosis Association.

May 25th—Bloomington, city sanitation.

May 28th—Fishers, schoolhouse inspection.

June 3d—Kennard, schoolhouse inspection.

June 4th—Huntington, to attend court on subpoena.

June 17th—Evansville, city sanitation.

June 27th—Spencer, summoned by grand jury.

June 29th—Valparaiso, city sanitation and public health lectures.

Full accounts of these visits are appended.

Washington, May 4th—On this date the delegates went to Washington, according to the permission of the Board, to attend the third annual meeting of the National Association for the Study and Prevention of Tuberculosis. The sessions extended over three days. Monday, May 6th, the Association was called to order in general meeting. There was an address by the President, Dr. Herman H. Biggs, followed by a report on the International Congress of Tuberculosis, by Dr. Lawrence F. Flick. In the afternoon the Associa-

tion divided into sections, namely: Section of Tuberculosis in Children; Sociological Section; Clinical and Climatological Section; Pathological and Bacteriological Section; Surgical Section.

The secretary attended the section on Tuberculosis in Children, of which Dr. Thos. M. Rotch, of Boston, was chairman. Four papers were read and discussed. On Tuesday morning, May 7th, I attended the Pathological and Bacteriological Section, of which Dr. F. F. Westbrook was chairman. Eight papers were read in this section. On Tuesday afternoon the entire Association was received by President Roosevelt, and following the reception we attended an address by Dr. Osler. On Wednesday, May 8th, I attended the Clinical and Climatological Section, of which Dr. George Dock, of Ann Arbor, was chairman. Four papers were read before this section and three reports were presented. The report of the committee on medication in tuberculosis was read, and the discussion when summed up amounted to the conclusion that medication was of little or no value. The report itself, and quite all the speakers, contended that very little medication for symptoms not caused by the tubercular condition was all that should be considered. The report of the committee on mixed infection and its discussion was most interesting and enlightening, and the paper entitled "The Varieties of Tuberculosis," by Dr. Woods Hutchinson, of New York, was striking.

I feel that I received much benefit and much enlightenment and surely acquired more enthusiasm on account of this visit to Washington.

Bloomington, May 25th.—On this date I visited Bloomington to confer with the authorities in regard to sanitary conditions in that city. I arrived about 11 o'clock and immediately met with the mayor and public health committee of the council. Bloomington's water supply and sewerage system, already constructed, and the sewers yet needed, were discussed and plans examined. I recommended the passage of a garbage ordinance, requiring that all householders shall keep their garbage in tightly-covered metal containers and that the same should be collected at least three times a week in the summer time and at least once a week in the winter time. For disposal of the garbage I recommended cremation, and lacking this, that the same be fed to swine at some distance from the city, or buried in a convenient ravine.

Fishers, May 28th.—I went to Fishers, a station on the Lake Erie & Western Railroad, in Hamilton County, in order to make a survey

of the schoolhouse at that place. This survey was presented at our last special session and acted upon.

Kennard, June 3d.—I visited Kennard on account of a schoolhouse, which was found very unsanitary. There was no opposition to building a new one, and, the advisory board and trustees being present, they then and there agreed that a new one should be constructed. No report, therefore, is required and no action by this Board.

Huntington, June 4th.—I went to Huntington in obedience to a subpoena from the circuit court, which was to try the cases of the schoolhouse condemnations at Monument City and Rock Creek Township. I was not called to testify, because the court dismissed the case on account of faulty procedure.

Evansville, June 17th.—At Evansville I consulted with the city engineer and committee from the council in regard to a sewer known as the Pennsylvania sewer, which was projected by the city government and which was opposed by certain citizens. This sewer, about two miles in length, was intended to drain a very wet region to the northeast of the city, and would empty into Bee Slough, a sluggish slough above the town. The objectors claimed that the sewer would become stagnant in Bee Slough and as the mouth of the same opened into the Ohio river about a quarter of a mile below the intake of the waterworks, that, therefore, the public water supply would be threatened. The plans of the engineer and all facts showed that for five years at least no sewage would be introduced into the sewer, and that it would only carry drainage from the land. As this drainage was exactly of the same composition as the water in Bee Slough, no objections could hold against it at the present time. It was, therefore, proposed to empty the sewer into the slough and leave to the future its extension down to the river. For if the extension were ordered at this time, it would be impossible to build the sewer, inasmuch as they could not carry the expense. A conference was held with citizens in the council chamber and it was finally agreed not to oppose the construction of the sewer, as it seemed to be the best that could be done.

Spencer, June 27th.—In obedience to a request by telephone from the judge of Owen County and the foreman of the grand jury, I went to Spencer. Upon arrival, the foreman of the grand jury, deputy prosecutor and a second member of the grand jury, went with me to visit three slaughter houses. It was the desire of the

grand jury to have my testimony in regard to these places. We found all three slaughter houses in horrible condition. It seems unnecessary to describe them, for the word "horrible" covers them completely. On return to Spencer, I was duly sworn and testified in detail concerning these abominable places to the grand jury. Being released, I was invited to take a ride with Hon. Temple G. Pearson, member of the legislature. He wished to show me a farm which he thought would be a good place for locating the State Tuberculosis Hospital. He was well aware that the State Board of Health has nothing to do with purchasing a site, but desired me to see it. I enjoyed riding over a beautiful tract of land, owned by Mr. Poncheon. Its area was about 900 acres. It was rolling and had many beautiful views of White river in the distance. I have since learned that the tuberculosis commission has viewed this land.

Valparaiso, June 29th.—Upon invitation from the Civic Association of Valparaiso and the mayor, Mr. Williams, I visited the said city, to deliver lectures and to consult with the local authorities in regard to sanitary affairs. Upon arrival, I was met at the station by the mayor and the local health officer, Dr. Evans. We immediately visited the waterworks and examined the new filtration plant, which is being constructed. The plans for said plant and everything pertaining thereto, were quite perfect, and after thorough study, I gave official approval of the same. Valparaiso is to be congratulated that very soon the city will have an abundant supply of soft and pure filtered water.

Saturday evening, June 30th, I delivered a lecture in the Christian Church, before a large audience, filling the entire auditorium, upon the subject of Food and Drug Adulteration, reviewing what the State Board of Health was doing to curb the evil. On Sunday evening, July 1st, I delivered a lecture in the Methodist Church upon "The Cause, Prevention and Cure of Tuberculosis." The audience filled the entire auditorium. On Monday morning, July 2d, I addressed 1,500 students of the Valparaiso College, especially assembled, upon "Personal Hygiene." In the afternoon I returned home.

I must contrast this visit and my reception at a former one made six years ago. At the time of the first visit, smallpox prevailed in Valparaiso. Not one of the city physicians had been able to diagnose the disease, but Professor Kinsey, vice-president of the Valparaiso College, had arrived at a correct diagnosis. The

general attitude of the citizens was against any interference on the part of the State Board of Health, and some of them indignantly repelled our efforts to relieve the situation. In a word, I found myself very unpopular and was very unkindly received. Now, what a change, as is shown by the fact that the mayor and other officials met your representative at the station, and showed him every honor and attention, and the people came out in hundreds to hear the Gospel of Hygiene.

CORRESPONDENCE WITH THE ATTORNEY-GENERAL.

The following correspondence explains itself:

Hon. Jas. Bingham, Attorney-General State of Indiana:

Dear Sir—The State Board of Health respectfully asks your opinion in regard to the following point:

The appropriation for this Board, page 680, Acts 1907, is in two parts. The first says:

“ * * * for other expenses, such as office expenses, impure food, pollution of streams and preventing the spread of contagious and infectious diseases, the sum of ten thousand dollars.”

The second says:

“For maintenance of laboratory of hygiene, purchase of food and drug samples, salaries of employes, transportation and hotel expenses of those necessary to conduct inspections, collect samples and attend prosecutions and for incidental expenses, fourteen thousand dollars.”

Some of the ground covered by the last quoted clause is also covered by the appropriation clause in the pure food law, page 158, Acts 1907.

Question 1. Will it be lawful to use any of the \$14,000 for pure food work, if the appropriation of the pure food act runs out, and it is to spare?

It is our positive information that the \$14,000 in the Ways and Means Act was an amendment by Senator A. J. Bowser, and that it applied to the first part and not to the second part of Section 7, and the printed law should have said fourteen instead of ten in line 14 of the Board of Health item.

In other words, by clerical error, the fourteen has been put in the wrong place. We understand there is no way to correct this “legislation by clerks,” but we wish to ask—

In view of the known fact that the extra \$4,000 was given, after long argument in the Senate, for stream pollution and for extending disease prevention work, would it be lawful to use it for such purposes? Or, shall the purpose and intent of the law-making power be thwarted by the error of a clerk?

Respectfully,

Secretary.

By order of the State Board of Health.

State of Indiana, Indianapolis,
May 8, 1907.

Dr. J. N. Hurty, Secretary of State Board of Health, Indianapolis, Indiana :

Dear Sir—Your communication, on behalf of the State Board of Health, received, stating that

“The appropriation for this Board, page 680, Acts 1907, is in two parts. The first says “ * * * for other expenses, such as office expenses, impure food, pollution of streams and preventing the spread of contagious and infectious diseases, the sum of ten thousand dollars.”

“The second says: ‘For maintenance of laboratory of hygiene, purchase of food and drug samples, salaries of employes, transportation and hotel expenses of those necessary to conduct inspections, collect samples and attend prosecutions, and for incidental expenses, fourteen thousand dollars.’”

You ask: “Will it be lawful to use any of the \$14,000.00 for pure food work, if the appropriation of the pure food act runs out, and it is to spare?”

Section 7 of the pure foods and drugs act (Acts 1907, p. 158) makes it the duty of the State Board of Health to enforce the laws of the State governing food and drug adulteration, and designates the chemist of such Board as a State food and drug commissioner; and \$15,000 is appropriated annually by section 8 of the act, “To be expended by the State Board of Health for the purpose of meeting expenses incurred in the enforcement of this act, including the salaries of the State food and drug commissioner, chemists, inspectors and clerks, the cost of collection of samples, purchase of laboratory supplies, aid in prosecuting offenders against this act, publication and distribution of bulletins, and other expenses incident to the enforcement of this law.”

The appropriation act of 1907 (Acts 1907, p. 680) appropriates certain money to pay the salaries of the secretary of the State Board of Health and other officers, and to pay the expenses of the members of the Board in attending the quarterly meetings of the Board, and “for other expenses, such as office expenses, impure food, pollution of streams and preventing the spread of contagious and infectious diseases, the sum of ten thousand dollars”; and again, “for maintenance of laboratory of hygiene, purchase of food and drug samples, salaries of employes, transportation and hotel expenses of those necessary to conduct inspections, collect samples and attend prosecutions, and for the incidental expenses, fourteen thousand dollars.”

Appropriations can only be used for the purposes intended by the legislature, and the intention of that body is to be gathered from the language used by it. This intention seems to have been clearly expressed and was to the effect that fourteen thousand dollars was appropriated for maintenance of laboratory of hygiene, etc., and it is my opinion that no part of it can be used by your department to prevent the pollution of streams or the spread of contagious and infectious diseases.

You state that “by clerical error, the fourteen has been put in the wrong place,” that it should have been in place of “ten” in the forepart of the act, and that the “ten” should have been in place of the word “four-

teen" in the latter part of the act. Whether there was a mistake in the enrollment or printing of the bill can make no difference now, since our courts hold—and correctly so, I think—that where a statute is duly authenticated by the presiding officers of the legislature, the court will not inquire as to the regularity of the proceedings before that time.

Evans v. Browne, 30 Ind. 514.

Since section 8 of the acts of 1907 (Acts 1907, p. 158), known as the pure foods and drugs act, appropriates \$15,000 to be used by your department for some of the same purposes for which the \$14,000 appropriation above shown is to be used, it is my opinion should said \$15,000 so appropriated be inadequate for the purposes intended, such portion of the \$14,000 appropriation as you may have to spare, if any, may be lawfully used by your department for pure food work as contemplated by the second appropriation for the State Board of Health (Acts 1907, p. 680).

I have the honor to be,

Yours very truly,

JAMES BINGHAM,
Attorney-General.

NOTICE CONCERNING CLEANLY HANDLING OF FOODS AND CONFECTIONS.

The rule of the Board passed April 10th, 1907, regarding the cleanly handling of foods, was promulgated by sending the following notice to persons interested in all parts of the state:

NOTICE TO MANUFACTURERS, DEALERS, VENDERS AND OTHER PERSONS ENGAGED IN THE SALE OF FOOD.

In accordance with a rule of the State Board of Health, made by them on the 10th day of April, 1907, relative to the sale of unprotected food products, and reading as follows:

Rule.—"No manufacturer, dealer, vender or other person shall expose for sale or exchange, or sell any bread, pastry, confectionery, shelled nuts, or other food so prepared that it is ready for consumption, unless such food is properly protected from insects, dust, dirt and other foreign or unwholesome material by suitable coverings."

Therefore, you are hereby notified to refrain from selling bread, pastry, confectionery, shelled nuts or other food prepared for consumption unless such food is properly protected from dust, dirt and other foreign or unwholesome material by suitable coverings of glass, wood or metal.

The violation of this order is punishable by a fine of ten dollars (\$10.00).

H. E. BARNARD,
State Food and Drug Commissioner.

SECRETARY'S REPORT FOR THE CALENDAR QUARTER ENDING
JUNE 30TH.

Kirklin Schoolhouse—A delegation of three citizens from Kirklin was present to request that the condemnation of the Kirklin schoolhouse be reconsidered, and that permission be given to make repairs. It was represented it would be impossible to build a new building by the time for opening school this fall, and also that the present building could be repaired and almost all sanitary requirements be met.

After argument was heard and many questions asked by different members of the Board, the following motion was made by Dr. Davis:

Moved, That the secretary make a second sanitary survey of the Kirklin schoolhouse, inquire into all the facts, and, in accordance with his judgment, act for and in the name of the Board. Carried.

Colfax Schoolhouse—Mr. Burr Bailey, trustee of Berry township, Clinton County, in regard to the Colfax schoolhouse, recently condemned, said in a letter to the secretary that: "A new site had been purchased, that the contract for a new building had been let, but it could not be completed before January 1st. He, therefore, requested a permit be given to use the old building until January 1st, 1907, or until the new building could be occupied. After discussion, Dr. Davis moved a reconsideration of the proclamation of condemnation. Carried.

Dr. Davis then moved the adoption of the following:

PROCLAMATION OF AMENDMENT.

The Indiana State Board of Health, in regular session, July 12, 1907, amends the proclamation of condemnation of the Colfax schoolhouse, adopted April 10, 1907, as follows, to wit:

The words "June 1st, 1907," the date after which the said proclamation forbids the use of the said schoolhouse for school purposes, are repealed, and the words, "January 1st, 1908," adopted.

Motion was unanimously adopted.

Ordered, The secretary shall duly serve the proclamation of amendment.

Orleans Schoolhouse—The following letter was read:

Orleans, Ind., June 7, 1907.

Dr. J. N. Hurty, Indianapolis, Ind.:

Dear Sir—At their meeting on June 6th, 1907, the Orleans School Board passed the following motion:

The Orleans School Board promises to provide blinds and baffle boards to all windows, and to build a sanitary school building by the beginning of the school year of 1908, if possible.

I will personally see that the blinds and baffle boards are put in according to your requirements, and that the teachers have proper instructions in regard to ventilation.

Trusting this will meet with your approval, I am,

Yours truly,

C. H. SHIRLEY,

Secretary.

After discussion and argument, Dr. McCoy moved a reconsideration of the proclamation of condemnation of the Orleans schoolhouse, adopted April 10th, 1907.

Carried.

Moved by Dr. McCoy that the following proclamation of amendment be adopted:

**PROCLAMATION OF AMENDMENT TO PROCLAMATION OF CON-
DEMNATION OF THE SCHOOLHOUSE AT ORLEANS, IND.,
ADOPTED APRIL 10, 1907.**

The Indiana State Board of Health, in regular session July 12th, 1907, amends the proclamation of condemnation of the schoolhouse at Orleans, adopted April 10th, 1907, as follows, to wit:

The words "June 1st, 1907," are stricken out, and the words June 1st, 1908, adopted.

Unanimously adopted.

**SANITARY SURVEYS OF CERTAIN SCHOOLHOUSES AND ACTION TAKEN
THEREON.**

**BOONE COUNTY, IND., MARION TOWNSHIP, DISTRICTS 11, 12, 13,
F. M. JOHNS, TRUSTEE, SHERIDAN, R. R. No. 21.**

EXPLANATION.

By G. R. Coffin.

June 13, 1907.

These are all one-room country school buildings. Districts seven and ten have been abandoned by the law, which requires a school with an average daily attendance of twelve or less to be abandoned. All of these schools are within one or two miles of Terhune, Ind. The trustee of the township, and a majority of the patrons of these schools desire to erect a

modern graded school building at Terhune. There is opposition to the procedure. The matter is in the courts, or was at the time of my visit. A majority of the patrons had voted to abandon these schools. The trustee had purchased ground upon which to erect a central building. He had issued bonds to cover the cost of the proposed building, and then an injunction suit had been filed against him and the advisory board. Their demurrer to the injunction proceeding was to be passed upon June 14th. The result is unknown to me.

DISTRICT ELEVEN.

Site.—This school is located about one and one-half miles north and west of Terhune, Ind. The plat contains one or two acres. The yard is well sodded.

Building.—The building is a one-room frame. It is 24 feet by 30 feet in area. It is lighted by six windows, each 3 feet by 7 feet. Three are in the north and three are in the south wall. It is heated by a large stove in the center of the room. There are no means of ventilation except by the windows and doors. The walls and ceilings are unclean. The floor is rough and dirty. There are thirty pupils, comprising all grades, in this building. The means of heating, lighting and ventilating make the building unfit for school purposes.

DISTRICT TWELVE.

Site.—This school is located about one mile north and east of Terhune, Ind. The plat contains an acre of land. The grounds are well sodded. The water supply is from a driven well.

Building.—The building is a one-room brick. It is 24 feet by 32 feet in area. The foundation is bad at the northwest corner. A number of bricks are gone, leaving the walls in a dangerous condition. The building is lighted by six windows, each 3 feet by 7 feet. Three are in the east and three are in the west wall. The floor is dirty and unsanitary. The walls and ceilings are in fair condition. The building is heated by a large stove in the center of the room. There are no means of ventilation except by the windows and doors. This building is dangerous and unfit for school purposes. Thirty pupils are enrolled.

DISTRICT THIRTEEN.

Site.—The school is located about one-half mile south of Terhune, Ind. The plat contains an acre or two of ground. The yard is well sodded.

Building.—The building is a one-room brick building. It is 24 feet by 32 feet in area. It is lighted by six windows, each 3 feet by 7 feet. Three windows are in the north wall and three are in the south wall. The plastering and paper is off the ceiling and walls in patches. The walls, ceiling and floor are absolutely filthy and unsanitary. Sixty pupils attend school in this filthy place. The room is heated by a stove in the center of the room. There are no means of ventilation, except by the doors and windows. Patrons say that the teacher has dismissed school during high winds on account of the swaying of the walls of the building. The building is unfit for school purposes.

Remarks.—Several citizens of these communities say that the opposi-

tion to a modern building comes mostly from people in the other end of the township and men who still own farms in the community but have moved to Lebanon to give their children proper school facilities.

Recommendations.—It is respectfully recommended that the above described buildings be condemned:

After full consideration of the survey, Dr. Davis moved the adoption of the following proclamations of condemnation of the schoolhouses of Districts Nos. 11, 12, 13, in Marion Township, Boone County, Ind.

PROCLAMATION OF CONDEMNATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in regular session July 12, 1907, that the schoolhouse known as District number eleven, in Marion Township, Boone County, Indiana, is old, dilapidated, badly ventilated, wrongly lighted, insufficiently and unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils; therefore, it is

Ordered, That the said schoolhouse is formally condemned and shall not be used for school purposes after the date July 12, 1907. Any township trustee, any school teacher, or any person who may use said schoolhouse for school purposes after July 12, 1907, shall be promptly prosecuted as by the statutes provided.

Unanimously adopted.

PROCLAMATION OF CONDEMNATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in regular session July 12, 1907, that the schoolhouse known as District number twelve, in Marion Township, Boone County, Indiana, is old, dilapidated, badly ventilated, wrongly lighted, insufficiently and unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils; therefore, it is

Ordered, That the said schoolhouse is formally condemned and shall not be used for school purposes after the date July 12, 1907. Any township trustee, any school teacher, or any person who may use said schoolhouse for school purposes after July 12, 1907, shall be promptly prosecuted as by the statutes provided.

Unanimously adopted.

PROCLAMATION OF CONDEMNATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in regular session July 12, 1907, that the schoolhouse known as District number thirteen, in Marion Township, Boone County, Indiana, is old, dilapidated, badly ventilated, wrongly lighted, insufficiently and unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils; therefore, it is

Ordered, That the said schoolhouse is formally condemned and shall

not be used for school purposes after the date July 12, 1907. Any township trustee, any school teacher, or any person who may use said schoolhouse for school purposes after July 12, 1907, shall be promptly prosecuted as by the statutes provided.

Unanimously adopted.

SANITARY SURVEY OF SCHOOLHOUSE AT NEBRASKA, DISTRICT
No. 2, CAMPBELL TOWNSHIP, JENNINGS COUNTY, IND.

By D. R. Saunders.

June 11, 1907.

The following is a report of examination of schoolhouse and site in Campbell Township, Jennings County, District No. 2, Nebraska.

Size of lot about 120x200 feet. Flat, no drainage. Water stands at corners of house and different places in lot after rains.

The building is old, dilapidated, frame, two rooms, one above the other, 25x31 feet; building faces south. Entrance door at southeast corner into vestibule six feet square, where stairway leads to upper room (door entering southwest corner), which is 25x25 feet. Has two windows on west and east side and north end. Teacher's desk at south end. Room contains twenty-three desks, large enough for two. Blackboard on south wall back of teacher's position. Lower room same size, windows the same as above. Contains twenty-three single seats, thirteen double seats. Each room has one castiron stove. Burns coal; stoves situated in center aisle about eight feet from north wall; use same flue. The stoves are not more than two feet from seats opposite, on center aisle.

The ceilings and walls of both rooms are broken, and the weatherboarding on lower story is broken off all around the house in places, and plastering off the inside. House has stone foundation, 18 inches up. Cloakroom on ground floor under stairway; entrance from schoolroom. Cloakroom for upper room, entrance from school room. These rooms are six feet wide, twenty-five long across end of building on upper story. The space is taken up by stairway on lower floor, so they use the space under stairway. The walls are broken so that you can see into cloakroom from outside. The windows all same size, twelve lights 10x16. Teacher's desk plain oak table, no seat but a soapbox.

Coal house, 10x20, in yard.

Closets, brick, one on each corner of lot back. No screens.

Approach to building not good. It has been graded some, but there are no sidewalks, street is not improved. Rains standing in gutter by side of street. Do not know of any sickness traceable to house. House is worn out and is certainly very unsanitary. Ventilation up through floor and side walls. Heating, the very poorest possible; water supply from well dug, 22 feet on lot, said to be good water.

The lot could be graded and be all right for school purposes; the building would have to be repaired to be fit for a stable.

After considering all the evidence, Dr. McCoy moved the adoption of the following proclamation:

PROCLAMATION OF CONDEMNATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in regular session July 12, 1907, that the schoolhouse at Nebraska, District No. 2, Campbell Township, Jennings County, Indiana, is old, dilapidated, badly ventilated, wrongly lighted, insufficiently and unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils; therefore, it is

Ordered, That the said schoolhouse is formally condemned and shall not be used for school purposes after the date July 12, 1907. Any township trustee, any school teacher, or any person who may use said schoolhouse for school purposes after July 12, 1907, shall be promptly prosecuted as by the statutes provided.

Unanimously adopted.

INSPECTION OF SCHOOLHOUSE AT AUGUSTA, PIKE COUNTY, IND.

By J. L. Anderson.

July 9, 1907.

Site.—One-fourth acre, high and dry, but not enough ground and unsuitable in surface condition.

Walks.—No walks of any kind. No well.

Water Closets.—Two, unsanitary in every way and absolutely abominable. No screens to them.

House.—Two-story frame, shingle roof, built about twenty-five years. On stone pillars with no underpinning, and has settled to west side, splitting roof at comb. Building faces south. Weatherboarding torn off badly around base, and split and warped all over house.

Hall.—6x22x10 feet, with a 3-foot box stairway in west end. Floor dirty, worn out and broken. Walls and ceiling wainscoted with tongued and grooved boards, and many of the boards loose and broken. Two windows, one on each side of entrance, light this hall. Used as a cloak and garbage room, from the looks and smell.

Lower Room.—22x30x10 feet. Wainscoted with boards same as hall.

Blackboards.—Simply painted with black paint on the boards. Light by six windows, 3x7 feet, two on each side and two in north end. Half the windows knocked out. Two wooden posts in center of room, supporting upper floor (which is sagging). Seats old and broken; floor worn, filthy, and apparently never been cleaned. Heated by "Cannon" stove; ventilation by windows and cracks in wainscoting. Enrollment, 55; average attendance, 45.

Stairway.—Three feet; reverse platform, broken at landing and dangerous.

Hall Above.—Same as below, except that the wainscoting was only as high as lower part of windows, and walls were plastered, but most of the plastering had been broken and fallen off.

Upper Room.—Same as lower room in size, but only an 8-foot ceiling. Wainscoting on sides to lower part of windows, and over head, walls plastered. Heated by "Cannonball" stove. Lighted by six windows, same as

below, and other conditions the same. Floor and whole building shakes when walked over. Enrollment, 40; average attendance, 35.

Besides this building the trustee had rented an old storeroom for the use of about seventy-five pupils that were unable to get into the schoolhouse. Whenever a storm comes up, or there is very cold weather, the school is dismissed on account of the dangerous condition of the schoolhouse.

It is unsanitary, filthy and dangerous. I recommend that it be condemned.

After considering the sanitary survey of the schoolhouse at Augusta, Pike County, Indiana, Dr. Wishard, moved the adoption of the following proclamation of condemnation:

PROCLAMATION OF CONDEMNATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in regular session, July 12, 1907, that the schoolhouse at Augusta, Pike County, Indiana, is old, dilapidated, badly ventilated, wrongly lighted, insufficiently and unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils; therefore, it is

Ordered, That the said schoolhouse is formally condemned and shall not be used for school purposes after the date July 12, 1907. Any township trustee, any school teacher, or any person who may use said schoolhouse for school purposes after July 12, 1907, shall be promptly prosecuted as by the statutes provided.

Unanimously adopted.

INSPECTION OF SCHOOLHOUSE AT BURNS CITY, MARTIN COUNTY, IND.

By J. L. Anderson.

July 8, 1907.

Site.—Southeast part of village and high and sloping to north. About one acre of ground in lot. No walks of any kind to or on lot. No well. Have to carry water from private wells.

Outhouses.—Two water closets and coal house. Water closets have no dug pits and no screens, and are in filthy condition; about 100 feet north of school building.

Schoolhouse.—A two-story, shingle-roofed, frame building of two rooms, built about twenty or twenty-five years ago; erected on stone pillars about one foot from ground. No underpinning; siding split and warped from bottom to top and torn off in many places. Faces south, with porch and halls at west end. Hall, 7x21x11 feet, used as cloakroom. No plastering used in the house. The hall was dirty and boards torn off the wall in several places, exposing the studding.

Primary Room.—The primary room on first floor is 24x36x11 feet; lighted by eight windows, 3x7 feet. Four are on the north and four on the south side of room. Windows are screened on outside by coarse wire.

Walls and ceilings are sealed by boards tongued and grooved. There are two wooden posts in this room to support the floor above. When the building was erected the space between the ceiling of the lower room and floor of the upper room had been filled in with sawdust, and on account of the boards drawing apart it was found necessary to put on a new ceiling in lower room two years ago.

Blackboards.—The blackboards are black oilcloth nailed to wall at east end of room. Room heated by "Cannonball" stove, placed in west end of room.

Seats.—The seats are in bad condition, broken, dirty and not enough for number of pupils.

Floor.—The floor is in fair condition, but has never been scrubbed since it was put in.

Ventilation.—There is no ventilation, except by windows and cracks between the boards used for inside sealing. Enrollment, 60; average attendance, 50.

Upper Room.—Entrance by a three-foot box stairway from hall below.

Hall.—Same size and conditions as below, except that more boards were torn off the walls and only an eight-foot ceiling.

School Room.—Same conditions as in lower room, with the exceptions that the ceiling is only eight feet high; the blackboards are slate, the floor is badly worn, and instead of being tongued and grooved is simply plain boards nailed down side by side. The floor and building shake very perceptibly when walking over the room. Enrollment in this room, 50; average attendance about 40.

Coughs, colds, sore throats and pneumonia were prevalent last winter. I consider the building unsanitary, unsafe, and a menace to health.

Remarks.—I was met at the depot by Dr. Hays, who showed me over the school building, and introduced me to several of the citizens, who are very anxious to have a modern building that would be sanitary and with enough room for a high school.

School was dismissed several times last winter on account of cold weather, and the school is always dismissed in the event of a heavy storm, as the building has been considered unsafe for several years.

The township is out of debt and can put up a good building. I respectfully recommend that the building be condemned.

After considering the sanitary survey of the schoolhouse at Burns City, Indiana, Dr. Wishard moved the adoption of the following proclamation:

PROCLAMATION OF CONDEMNATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in regular session, July 12, 1907, that the schoolhouse at Burns City, Martin County, Indiana, is old, dilapidated, badly ventilated, wrongly lighted, insufficiently and unevenly warmed and otherwise unsanitary, so as to threaten the health and lives of the pupils; therefore, it is

Ordered, That the said schoolhouse is formally condemned and shall not be used for school purposes after the date July 12, 1907. Any town-

ship trustee, any school teacher, or any person who may use said schoolhouse for school purposes after July 12, 1907, shall be promptly prosecuted as by the statutes provided.

Unanimously adopted.

Secretary's report accepted and ordered spread of record.

Ordered, The secretary shall be a delegate to represent the Board at the annual meeting of the American Public Health Association, to be held in Atlantic City, the first week in October, 1907, and that either Dr. Tucker or Dr. Wishard be a delegate, they to determine which shall act.

Ordered, That H. E. Barnard shall be a delegate to represent the Board at the annual meeting of National Association of Food Chemists, to be held July 12th to 17th, at Norfolk, Va.

SPECIAL MEETING.

September 12, 1907.

Called to order at 10:45 a. m. by President Tucker. Present: Drs. Tucker, Wishard, McCoy, Davis, Hurty.

KIRKLIN SCHOOLHOUSE.

A delegation of about twenty citizens of Kirklin, including the local school board, appeared before the Board and asked that the date of condemnation of the schoolhouse, condemned to take effect June 1st, 1907, be extended to June 1st, 1908.

Mr. Williams, chairman of the school board, stated the position of the petitioning citizens, and speeches supporting the request were made. Upon retirement of the visitors, the following order was adopted:

Ordered. The date of condemnation of the schoolhouse at Kirklin, Clinton County, Indiana, is extended from June 1st, 1907, to June 1st, 1908, and permission is given to use the said schoolhouse for school purposes for the school term of 1907 and 1908: Provided, The following improvements and sanitary regulations are made and adopted, to wit:

First: The roof must be repaired so as to prevent leaks, and the gutters and downspouts shall be properly repaired.

Second: Only the first floor or lower floor shall be used and the stairways leading to the second floor shall be boarded up.

Third: Where plaster has fallen off in the first story or lower rooms, the same shall be replaced.

Fourth: All windows of the lower rooms shall be put in movable condition, so they can be raised and lowered easily for ventilation purposes.

Fifth: The interior walls of the lower rooms shall be cleaned, white-washed or painted.

Sixth: The floors, desks, windows and window sills of the lower rooms shall be washed with soap and hot water.

Seventh: The teachers shall be instructed to carefully watch the pupils, and to send home at all times any child found to be in the least degree ill. The teachers shall be instructed, further, to flood the rooms with fresh, outside air at every recess.

Eighth: All of the above requirements shall be approved by the executive officer of the Board before school shall be held in the said Kirklin schoolhouse.

Ninth: It is expressly and clearly understood that the condemnation of the schoolhouse at Kirklin still stands, and that an extension of the date of the taking effect of said condemnation is herewith simply made to June 1st, 1908.

**INSPECTION OF THE WHITCOMB SCHOOLHOUSE, DISTRICT No. 6,
MICHIGAN TOWNSHIP, CLINTON COUNTY; TRUSTEE, S. M.
PITTMAN, MICHIGANTOWN, INDIANA, R. F. D. No. 1.**

By J. L. Anderson.

August 27th.—The approach to this building is by dirt road. The ground is high and dry, comprising about one acre in extent; a dug well, about twelve feet deep, with wooden pump, in the southwest corner. The water is surface water and not fit for use. There are two water closets, in the northeast and northwest corners, respectively, of the yard. There are no walks, no screens, and in very bad condition. No walks about the premises, whatever. The building, a one-room brick, shingle roof, size about 30x34 feet. This building was put up about thirty years ago. The woodwork all burned out and was rebuilt about sixteen years ago, without rebuilding the walls, but one-inch iron rods were put through both sides and both ends at the top of the wall to hold them together. The building has a stone foundation about twenty inches above the surface of the ground with three iron ventilators on each side of the building. There is a wooden platform, 6x10 feet, in front of door. The door is a five-panel with the two lower panels knocked out. The casing is loose, and could be easily knocked out of the opening. The stone doorsill is worn and loose. There is a round opening above the door into the garret about 18 inches across, but the front wall is cracked and bulged until the frame and light that were in this opening have fallen out, and is open to the weather. The belfry over the front door is slightly sagged to the east, the front wall is cracked from top of the door frame to the comb, and the roof has spread about 1½ inches at the corner. The southeast corner of front wall is cracked from three feet above the ground to the rod in the upper corner. The southwest corner of the front wall is cracked from the foundation to the upper rod. The front wall is bulged out about four inches. The walls upon the east and west sides are cracked from

the base to the bottom of the window sills and from the tops of the sills to the top of the wall, the bricks being loose on the upper sills. The wall in the north end of the building is cracked from base to eaves and bulged out. There are six windows $2\frac{1}{2} \times 7$ feet, three on the east and three on the west side. The walls are wainscoted to the base of the windows about $3\frac{1}{2}$ feet; the balance is plastered and painted a light blue. The ceiling is sagged about six inches in the center. Blackboards at north end are painted on the plaster. The floor is in fairly good condition, but not oiled. There was an opening by the stove which was originally intended to receive cold air, passing in around a jacket stove, but which has been closed and covered with a zinc cover. The room is heated by coal stove in the center of the room. There are ventilators on the east and west sides of wall near floor which were tightly closed. The plastering is broken at the south end of room. A part of it has loosened and fallen to the floor, and along the upper corner next to the wall has separated from the ceiling and pulled away.

There are 49 seats in the room, in poor condition. Enrollment at this building is 20 pupils; the average attendance about 15.

I would respectfully recommend that the building be condemned as unsanitary and dangerous. If it were not for the retaining rods at the upper part of the wall, in my opinion, the building would collapse at the first heavy wind, as both the front and back walls are in such condition they would naturally fall at very little pressure.

Remarks.—I was accompanied on this inspection by Dr. Byron Thorpe, health officer of Michigantown, and Mr. Crawford, a member of the town board of Michigantown, and while making the survey of the building there were a number of the patrons who came over and talked about the condition of the building. This schoolhouse is situated about three miles southeast of Michigantown, one mile of this distance being dirt road, two miles good gravel road, and the pupils could be easily transported to the Michigantown school building, where they would have good sanitary surroundings and better advantage in the way of education than they could possibly have at this building.

After consideration, the following was unanimously adopted:

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health, in session Sept. 12th, 1907, that the school building known as Whitcomb schoolhouse, District No. 6, Michigan Township, Clinton County, is unsanitary and unfit for keeping school therein; therefore, it is

Ordered, That said schoolhouse is herewith condemned for school purposes and that the same shall not be used for school purposes after November 1st, 1907; and it is further

Ordered, That the state health officer shall see to it that this condemnation is enforced by promptly prosecuting, in the name of the Indiana State Board of Health, any trustee or teacher or any person who may violate said condemnation.

FISHERS STATION SCHOOLHOUSE.

To the State Board of Health, Indianapolis, Ind.:

Gentlemen—We, the undersigned patrons of the public school, District No. 5, at Fishers Station, Delaware Township, Hamilton County, Indiana, do hereby ask permission to keep our school children from attending school in the old, unsanitary building, now proposed and provided by the township trustee of Delaware Township, as temporary quarters for holding school until the new school building is erected and completed, the said old buildings so provided being unhealthy and unsanitary in every respect, and unsafe, and will necessitate crowding, and we fear for the health and comfort of the children who are of school age, and who will attend school at the places provided, unless our petition is granted.

B. F. Castetter, Principal, R. R. 35.	J. H. Klepfer.
Newton Castetter.	J. M. Frazer.
Joseph Emery.	J. M. Arthur.
Chas. L. Dawson.	J. A. Young.
W. E. Seymour.	W. F. Humbles.
B. L. Frazier.	Ed. F. Conner.
Ora Frazer.	A. J. Crossley.
D. M. Cox.	I. D. Castetter.
Douglas Castetter.	

After consideration of the above, the same was ordered laid on the table.

RULES—WHISKY.

Mr. Barnard presented a set of rules concerning standards for whisky, defining whisky and governing the labeling of whisky. Mr. Leo Rappaport, attorney for the liquor interests of the state, was present and made an argument to the effect that action should be delayed because the U. S. authorities had not yet acted and because the U. S. Supreme Court would eventually have to rule upon the U. S. standards, which were essentially the same as those contemplated in the proposed rules. The argument was considered good and a further consideration of the matter was postponed until the next regular meeting, October 11th.

JAMESTOWN SCHOOLHOUSE.

Sept. 9, 1907.

Indiana State Board of Health, Indianapolis, Ind.:

Gentlemen—At your meeting held May 1st you condemned the schoolhouse at Jamestown, Ind., in Boone County, Jackson Township. I have been building a new schoolhouse at Advance, at an expense of about \$20,000. This precludes the possibility of building a new schoolhouse at Jamestown this year, simply because the money was not to be had. On this account the township advisory board could not and did not make an

appropriation. I think it is possible to put the condemned schoolhouse in such shape that it will not be altogether objectionable, and will gladly do so, if your honorable board will grant the extension of the time of condemnation. I will promise to have the schoolhouse thoroughly cleaned, the walls calcimined as soon as possible, and new outhouses will be built with good approaches to them. I will also command the teachers to look closely after the ventilation of the rooms, and the windows will all be looked over to see that they can be raised and lowered easily. I will also have baffleboards put in at least two windows in each room. I believe these changes will make the building more useful and will attend to them without delay.

Again respectfully requesting an extension from your honorable board,
I am,

Respectfully,

W. H. MILLER,
Trustee Jackson Tp., Boone Co.

After consideration of the Jamestown schoolhouse matter, the following order was adopted:

Ordered, That the date of the condemnation of the Jamestown schoolhouse be extended from June 1st, 1907, to June 1st, 1908, and that the said school may be used for school purposes for the term of 1907 and 1908: Provided, The said schoolhouse is thoroughly cleaned, the walls calcimined, all windows made to move easily up and down for purposes of ventilation, all windows provided with baffleboards, and the teachers directed to flood the schoolrooms with air at all recesses and at noon, and to promptly send home any child that is known to be sick.

LECTURES AND CIRCULARS ON VENEREAL DISEASES.

The secretary proposed that the Board take up the fight against venereal diseases; that circulars be published for free distribution and that lectures be given before the youth of high schools, by members of the Board, or by others, who might be enlisted in the work. The secretary said that he had already spoken to Dr. C. S. Woods, professor of Chemistry in the Indiana Medical College, and that that gentleman, being deeply interested, a good lecturer and well-equipped for the work, would make lectures from time to time before the young men of the state, his expenses to be paid by the localities where said lectures were given.

After discussion of the matter, it was

Ordered, That the secretary shall write and publish a circular treating of the dangers and the prevention of venereal diseases, and that the Board herewith expresses its confidence in Dr. C. S. Woods as a public lecturer upon venereal diseases and recommends him as such to the public.

RULES.

The following rules, after study and discussion, were unanimously passed:

RULES GOVERNING CANNERS AND PACKERS IN CERTAIN SANITARY MATTERS AND IN CERTAIN FEATURES OF CANNING AND PRESERVING.

Rule 1. Packing houses, canneries and all food-preparing establishments shall be well lighted and ventilated, provided with sanitary water closets, separate from rooms in which foods are prepared, and also provided with suitable sanitary washing facilities.

Rule 2. Floors shall be made of cement, or of solid plank so laid that they may be flushed with water at the end of each day. False or loose floors are forbidden unless laid over cement.

Rule 3. No water or waste material shall be allowed to accumulate under or about any factory, canning or packing house, and all drainage shall be efficient and sanitary. All refuse or substances liable to fermentation or decay shall be promptly removed.

Rule 4. The employment is prohibited of persons suffering from cancer, tuberculosis, syphilis, gonorrhoea or any contagious or infectious diseases, or whose hands have sores upon them.

Rule 5. Proprietors of packing houses, canneries and of all food-producing establishments shall post notices prohibiting spitting upon floors, and shall require employes to wash their hands after going to the water closet and before returning to work.

Rule 6. The use in food products of saccharine, dulcin, sucrol, garan-tose, hayden sugar crystals, glucin, or any coal tar sweetness, is prohibited.

Rule 7. The use of sulphurous acid or any of its salts, either as a bleach or preservative, is prohibited.

Rule 8. The use of any antiseptic or preservative substances except salt, salt-peter, sucrose, vinegar and spices, is prohibited; but one-tenth of one per cent. of sodium benzoate may, for the packing season of 1907, be used for preserving tomato catsup and bulk sweet pickles.

FLOYD COUNTY JAIL.

On account of several complaints I visited New Albany, September 5th, in company with Mr. Amos Butler, secretary of the State Board of Charities, to investigate the sanitary conditions of the Floyd County jail. In regard to the same, I have to report as follows:

The Floyd County jail, built in 1858, is of stone construction, having in its interior an iron cellhouse, three tiers of cells in height, thirty-four cells in all. The first or bottom range of cells are ten in number, one being used for a water closet and the space by two cells is occupied as a passage and an area for a castiron bath tub, said tub being supplied with hot and cold water. The middle range of cells on the west side are used for female prisoners and are connected by a bridge with iron lattice

on each side and with an iron stairway with the corridor which opens directly into the sheriff's office. The gallery of the female cells is partitioned from the male galleries by an iron lattice which permits the prisoners of both sexes to plainly see and converse with each other. More than this, the arrangements permit personal contact.

The iron cell structure has not been cleaned or painted for many months, as is plainly apparent upon casual inspection. Accumulations from expectoration and dirt are in many corners, and in other places. The closets, which were formerly in the cells, have been torn out, and now one closet, constructed in one of the ground-floor cells, serves all the male prisoners. The pipes leading from this closet are clogged and sewage remains upon the floor. This closet is exceedingly foul, and odors from it permeate the entire building, so that the prisoners live, as it were, in a foul privy or sewer.

The jail is lighted by barred high windows in the east and west sides of the outer walls, and said windows are very dirty, not having been washed for a long time. The window sills in the space between the grating and the glass are covered with dirt and accumulations of cigar and cigarette stumps, quids of tobacco and various kinds of trash, as little piles of rags, burnt matches, dead flies, etc.

The bunks in the cells are provided with mattresses, some of them old and dirty, and some new and passably clean. The prisoners sleep in their day clothes. No bugs were found upon search, but I was assured by prisoners they appeared from time to time and a constant fight was necessary to keep them out. Spittoons were provided, all of them being well filled and in repulsive condition. No effort seems to be made to make the prisoners use the spittoons, for spitting anywhere and everywhere is done all the time.

The ventilation is by the high windows on the sides, and is insufficient, as also is the lighting.

At the time of my visit there were fifteen prisoners in the male department, and three women and one boy eleven years old occupied the corridor and the women's cells. Two of the women were colored and all three were hardened creatures.

One young man, a consumptive, now in the highly infective stage of the disease, was among the prisoners. His offense is embezzlement, and not being able to give bond, he must be imprisoned until the October term of court for trial. This man coughs a great deal, and although he assured me he always expectorates in the spittoons, still, through his coughing he spreads infection continually. There is now not the slightest chance for his recovery, whatever might have been his chances before imprisonment.

The closet in the corridor for the use of the females is in one corner, has no outdoor ventilation, and although not clogged, still was unfit for a decent person to use.

Dr. Wilcox, jail physician, reported thirteen cases of gonorrhoea among the male prisoners, which was contracted from a female prisoner while in the jail.

One of the colored female prisoners, upon being questioned, told me contact between the sexes was frequent, and was accomplished by the men swinging themselves by a blanket from the upper tier of cells to

the outside of the lattice below, and the women on the inside of the lattice raised themselves to the level of the men by piling mattresses on the floor of the gallery.

Dinner was being served at the time of the inspection, and consisted of bread, boiled beans, meat and coffee. The food was of good quality and well cooked.

Summary.—The Floyd County jail is old, never was properly constructed, is foul, dirty, malodorous, sewer pipes clogged, insufficiently lighted and ventilated, infected with disease, immorality of the most horrible kind is continually practiced among the prisoners, and altogether it is a disgrace to New Albany, to Floyd County, to the State of Indiana, and to civilization.

Recommendations.—I recommend that the Floyd County jail be condemned as unsanitary, and in every hygienic way unfit for use as a jail.

Concerning the Floyd County jail the following action was taken:

CONDEMNATION.

Whereas, It has been shown to the satisfaction of the Indiana State Board of Health that the Floyd County jail at New Albany, constructed in 1858, is insufficiently lighted and ventilated, is dirty, foul, reeking with sewage on account of clogged sewer pipes, and is certainly infected with tuberculosis and other infectious diseases; and,

Whereas, The construction admits of sexual commerce between the sexes, with, in well-known instances, transmission of gonorrhoea and possibly syphilis; therefore, it is

Ordered, That the Floyd County jail at New Albany is condemned and the Floyd County Board of Commissioners are commanded by the Indiana State Board of Health, having the power as provided in the statutes, that the said county council and said board of commissioners shall proceed without unnecessary delay to make the Floyd County jail sanitary in one of two ways, to wit: First, by erecting a new jail, having all modern sanitary conditions, as may be prescribed by the Indiana State Board of Health; or, second, by thoroughly renovating the present structure, and in order to accomplish said renovation the following procedure shall be adopted:

(a) All prisoners shall be removed, the interior walls, floors and all iron and steel work thoroughly cleaned with lye water and soap, and after this cleaning the said interior walls and iron work shall be painted. A completely separated female department shall be prepared, so arranged that males and females can not see and can not communicate with each other. All present closets shall be torn out and new ones put in, at least two new closets for the males and at least one for the females. The present sewer pipes shall be dug up and new ones laid of ample size to completely carry off all sewage.

It is further ordered that two modern porcelain bath tubs be provided, one for the males and one for the females, said tubs to be supplied with an abundance of hot and cold water and to be properly connected with the sewer.

The above condemnation and order was unanimously passed.

Fourth Regular Meeting.

REGULAR MEETING, INDIANA STATE BOARD OF HEALTH.

October 11, 1907.

AFFAIRS CONSIDERED OF THE FISCAL QUARTER ENDING JULY 31ST, 1907, AND THE STATISTICAL QUARTER ENDING SEPT. 30TH, 1907.

Called to order by President Tucker at 2 p. m. Present: Drs. Davis, McCoy, Hurty.

Minutes of the last regular meeting held July 12th, 1907, and minutes of the special meeting held Sept. 12, 1907, read and approved.

REPORT OF SECRETARY FOR QUARTER ENDING SEPTEMBER 30, 1907.

The correspondence during the last quarter was much heavier than in the corresponding quarter last year. The statistics and office work, also the work of both laboratories, have been carefully kept up to the standard. Reports of the work done in the laboratories are appended to this report.

The International Congress on Tuberculosis, to be held in Washington in September and October, 1908, has been a central piece of work during the quarter. The secretary-general of the International Congress, Dr. John S. Fulton, has sent out circulars to all the state boards of health, followed by letters urging the participation of the states. Circulars and letters were also sent to all governors and to all mayors of cities having a population over 25,000. In response to the letter of the Governor of Indiana requesting him to do what he could to make the International Congress a success, we have to present the following communication:

October 4, 1907.

To the Indiana State Board of Health:

Permit me to enclose you herewith correspondence from Dr. John S. Fulton, secretary-general of the International Congress on Tuberculosis, extending an invitation to the State of Indiana to participate through the Governor, the State Board of Health, boards of health of municipalities, and other agencies in Indiana interested in tuberculosis, in the International Congress on Tuberculosis, to be held in Washington, D. C., September 21 to October 12, 1908, by sending delegates and contributions of

exhibits thereto. This congress promises to be one of unusual importance. It will be a great gathering of scientific men from the civilized nations of the world, and I deem it advisable that the State of Indiana be properly represented.

I suggest, therefore, that the State Board of Health take steps to insure the presentation of such exhibits on the part of this commonwealth as the Board after due consideration may deem proper and advisable, and that invitation be extended to the boards of health of municipalities and other agencies interested in tuberculosis to join with the state in participating in the congress.

I submit herewith correspondence from the files of this office relative to the subject.

Very truly yours,

(Signed) J. FRANK HANLY,
Governor of the State of Indiana.

It will be noted the Governor recommends that the State Board of Health take steps to insure the presentation of such exhibits on the part of this commonwealth as the Board may deem proper and advisable, and as secretary, I also recommend that said action be taken. I also recommend that this Board request the Governor to write a letter to the county health officers of the state and the health officers of the cities having a population over 10,000, calling their attention to the International Congress on Tuberculosis, its very great importance, its purpose and scope, and to urge that they become interested and join in the work of making the congress a success. I further recommend that this Board write a similar letter. In connection I will state that the governors of the following states have written letters of the character recommended above: New York, Illinois, Ohio, Pennsylvania and all the New England states.

SMALLPOX COMPARISON FOR THIRD QUARTER.

Date.	Number of Cases Reported.	Number of Deaths.	Number of Counties Invaded.
July, 1906.....	31	3	6
July, 1907.....	74	.....	21
August, 1906.....	40	.....	3
August, 1907.....	63	.....	18
September, 1906.....	51	2	10
September, 1907.....	23	.....	7
Total, 1906.....	122	5	19
Total, 1907.....	160	.....	46

TYPHOID FEVER COMPARISON FOR THIRD QUARTER.

Date.	Number of Cases Reported.	Number of Deaths.	Number of Counties Invaded.
July, 1906.....	180	62	55
July, 1907.....	312	53	64
August, 1906.....	446	98	68
August, 1907.....	728	131	79
September, 1906.....	977	143	76
September, 1907.....	642	133	76
Total, 1906.....	1,603	203	199
Total, 1907.....	1,682	317	219

VISITS AND INSPECTIONS.

Seven visits and inspections were made as follows:

July 8th, Danville, on account of inspection of water supply and conference with town authorities.

July 12th, Kirklin, on account of reinspection of schoolhouse as ordered by the Board.

July 16th, Carmel, in order to meet with the town board and advise in regard to sanitary work, and in the evening to talk to an audience especially gathered in regard to public sanitary affairs.

August 30th, Bedford, to meet with the county and city authorities to consider public health affairs. The special point to be considered was the continuation of the hitch rack at Bedford.

September 5th, New Albany, to inspect the jail, report of which has heretofore been presented and acted upon.

September 7th, Lafayette, to visit the State Soldiers' Home and make sanitary inspection.

September 20th, Morgantown and Martinsville, to inspect the schoolhouses at Morgantown and to confer with the township trustee in regard to a new one to be constructed. At Martinsville, to inspect the books of the local health officer, who had been negligent of his duties and from whom no response to letters could be secured. Below, full reports of these visits are given:

Danville.—On arrival at Danville, where I was accompanied by Mr. C. C. Clapp, an inspector of the U. S. Geological Survey, we were met by the chairman of the town board, the clerk, and Mr. Julian Hogate, editor of a local paper. Together we visited the water works. Danville is supplied from deep, flowing wells. Upon removal of caps, the water is projected to a height of six feet. The supply is abundant, is cool, and analyses have shown it to be pure and wholesome. The system is that known as the Holley system,

where the water is distributed by direct pressure. There was no complaint in regard to the public water supply. The only question was, is it good and plentiful? Both of these questions could be answered in the affirmative, and Danville is to be congratulated upon having such a remarkable water supply, which is so pure and so abundant. Upon return from inspection of the water works, a conference was held in regard to the continuance of the horse-rack, and the sanitary features attached thereto. The secretary presented sanitary arguments why the horse-rack should be removed, calling attention to the advantages which would result from the sanitary changes.

From Danville, with Mr. Clapp, I rode to Cartersburg and Plainfield, at both places meeting with the local authorities, discussing sanitary conditions and making recommendations.

Kirklin.—July 15th: Kirklin was visited on this date in order to make a second survey of the schoolhouse at that place, according to the commands of the Board. Upon arrival I was met by the local health officer, Dr. Parker, and together with a number of citizens, examined the schoolhouse. The conditions discovered confirmed fully the previous survey made by Captain Anderson, and upon which the said schoolhouse was condemned. According to the power conferred by the Board, I did not waive the condemnation but continued the same.

Carmel.—July 16th: On account of an invitation of the local authorities, a local society of women for civic improvement, I went to Carmel. Upon arrival, together with the local health officer and citizens, alleys and the schoolhouse were inspected, also the local creamery and slaughter house. The slaughter house was found in abominable condition, but no action was necessary because the proprietor of the same promised to immediately quit using it for slaughtering purposes and to clean it up. I have learned since this has been done. In the evening a large audience was addressed in the Friends' Church upon the subject of municipal and domiciliary hygiene. I believe this visit will eventually produce good results.

Bedford.—August 30th: An invitation from the county and city authorities caused me to go to Bedford to consult in regard to various public sanitary matters, but especially in regard to the public hitch-rack. New streets are being built around the public square and sidewalks and sewers are also being built. The ques-

tion was, whether or not to continue the public hitch-rack. The matter was gone over fully from all points of view, and upon taking a vote it was the sense of the meeting that the hitch-rack should be abolished. The county and local health authorities were addressed in regard to their duties and the good work that they could do under the law to raise the public health.

New Albany.—September 5th: With Mr. Amos Butler, secretary of the State Board of Charities, I went to New Albany to inspect the jail. Full report of this inspection was presented to the last special meeting; the same was accepted and acted upon.

Lafayette.—September 7th: This visit was for the purpose of inspecting the Soldiers' Home and making such recommendations as might seem proper. It was a stormy day and the inspection was somewhat difficult upon that account. I have to report very great improvements in the hospital since our previous inspection and recommendations from this Board. The water closets now have cement floors and cement walls to a distance of 4 feet high. The partitions are raised from off the floor, repainted, and the ventilation bettered. On account of the original defects in the hospital when built, it is impossible by improvements to produce the sanitary conditions which economy and the proper care of the sick demand. A new hospital is now being constructed, and the plans, if adhered to until the end, show that the new building will be sanitary in all respects. The health of the institution is good, but, of course, the sick rate and death rate is very high, because all the inmates are aged people. Tuberculosis exists very extensively, but there is no hope of saving any of the cases examined, because of the advanced age and because of the advanced condition of the disease. Several minor recommendations were made to the commandant, for which he expressed thanks.

Morgantown.—The schoolhouse at Morgantown was condemned as unsanitary one year ago, and subsequently permission was given to the trustee to use the schoolhouse this winter, provided certain improvements were made. Complaint by telephone was received that improvements were not made and asking for an inspection. Accordingly I went to Morgantown on September 20th, called upon the trustee, and together we visited the schoolhouse. I found the report to be true in part. Galvanized iron jackets had been provided for the stoves, but ventilating boards had not been placed in the windows. The trustee said he was waiting for these

boards, that they were ordered and would be in place very soon. I met two members of the advisory board and we talked the situation over. It was agreed that a new schoolhouse would be erected next year and ground has already been purchased.

Martinsville.—From Morgantown I went to Martinsville and called upon Dr. Sweet, acting deputy for Dr. Monical. We had been unable to secure satisfactory reports from Dr. Monical. Miss Stuart of the office force had been in Martinsville some weeks before, and in accordance with directions had called upon Dr. Monical to see his books. He refused to let her look at them, saying that he had employed a man to do the work and that he would see to it that the work was done. I found the books at Dr. Sweet's office and quickly discovered that Dr. Monical had been very derelict. A large number of birth reports were in a cigar box, unrecorded, and there was also a considerable lot of contagious disease reports. It seems that Dr. Monical had not attended to the affairs of his office at all, and was derelict in every sense of the word. Later I directed Miss Stuart to go to Martinsville and post up the books, which was done and her report follows. While in Martinsville, I called upon the auditor and talked the matter over with him and asked him to bring it before the county board of health. Upon return, I wrote a letter to the County Board of Health, to be delivered through the auditor. At this date it is known that Dr. Monical will not return from California, and that a new health officer will be appointed.

On October 2d, Miss Stuart went to Martinsville, Morgan County, to make up reports of births, marriages and contagious diseases for the quarters ending March 31, June 30, and September 30, 1907. There were no records of either births, marriages or contagious diseases entered upon the books for the year 1907, but the reports of births and contagious diseases which had been sent in by the doctors in the county were found in the office of the secretary, Dr. G. S. Monical, and from these a report was made up for each of the three quarters. As there were no records of marriages in the secretary's office, this report was made from the record of marriages found in the county clerk's office. No record of marriages has been kept by the secretary since 1905. There were only twenty-four contagious diseases entered upon the record books for 1907.

The transcripts of records of death, which are sent to the secretary at the end of each quarter, had not been bound for the year

1906, and all books in the office were found in a very bad condition. The reports from Morgan County are, with the exception of the returns for September, which had not yet been received at the county office, on file in the State Board of Health.

COLLECTION OF RECORDS OF BIRTHS.

According to the law passed by the Sixty-seventh General Assembly, and according to the directions of the Board, all preparations have been made for collecting births under the new law, commencing October 1st. New birth certificate blanks were printed, the same according with those furnished by the U. S. Census Bureau, and which are also in use by New York, Massachusetts, Pennsylvania and Michigan. These blanks have been distributed to all doctors in the state and all health officers have been instructed by special circulars in regard to their duties. In addition to this, the newspapers in every locality have been requested to publish the facts in regard to the enforcement of the new law, and to impress upon the people the very great importance of having accurate records made of all births, deaths and contagious diseases. These notices and brief articles were gladly printed by the newspapers and the prospects for a more accurate collection of births are very good.

SANITARY SURVEYS IN ORANGE COUNTY.

By F. W. Tucker, Noblesville, Ind.

I herewith submit a report of various sanitary surveys made in Orange County, Indiana, as follows, to wit:

August 23, 1907, I visited School No. 6, in French Lick Township, Orange County; found the following conditions: Site—Ground high, dry, and rolling, good drainage, clay soil, over limestone. Building an old one-room frame, on plaster foundation, under each corner and center of building. Sits about two feet off the ground, no wall, no basement under house, house in need of repairs. Roof leaks very badly and the plastering has fallen off about the flue. The house is heated by a boxwood stove; no protection to children near the stove; there is no well at this school; the children carry water from a spring about one-fourth mile from the schoolhouse. There is no form of ventilation except by the windows and doors and floor openings. There are two closets that are mere excuses for the name, built out of straight siding, open cracks, no vaults, both closets full of feces up to seats, no screens for the girls' closet. The yard is grown up with weeds and rank vegetation. Children have bronchitis and tonsillitis in epidemic form every winter, and the school is very much interfered with.

I would recommend new and thorough heating service, with hoods for the stove, repair to roof and ceiling, and sanitary, screened closets, with better facilities for drinking water as a temporary arrangement.

School No. 11, in French Lick Township, Orange County, was visited by me on Saturday, August 24, 1907, and found the site high, rolling, good drainage, clay soil over limestone. Building a one-room frame building, open foundation about two feet off ground. Roof good and new, plastering off room on ceiling, around flue hole, floor open in several places, room is lighted by seven (7) windows, giving sufficient light. School is heated by a box wood stove, no hood or screen around it. The stove sits in center of room. There is no well at this house. The children carry water about 300 yards. Only one closet and it in a disgraceful condition. Recommendations are that new sanitary closets be provided, new well, or facilities for water, that the foundation be closed under entire house, thereby making it warmer. That good and sufficient sunshades be provided.

These findings and recommendations be furnished to Thomas J. Carre, township trustee, French Lick, Ind.

August 26, 1907, I made a sanitary survey of French Lick, in company with Dr. Tolliver, the town health officer, and found the streets and alleys in very bad condition; also the backyards and many vaults and vacant lots, and made suitable recommendations in each case, with instructions to have same observed at once. The town is improving the streets and sidewalks and providing good and much-needed drainage. I feel that if the suggestions as made are carried out there will be much good done.

On Tuesday, August 27, 1907, I called on Dr. Boyd, town health officer of West Baden, and found him out, but proceeded to make sanitary survey of the town, and found a dirty, filthy condition of streets, alleys and vacant lots, and every evidence of no observance of a weed-cutting ordinance, and would make the following recommendations to Dr. Boyd, health officer, West Baden: That the streets, alleys and all vacant lots be cleaned and kept clean and garbage and all decayed vegetable matter at hotels, restaurants and private homes be cared for and cleaned up and kept clean, and that the weeds and other rank vegetation be cut and kept cut, same to be observed on or before September 15, 1907.

On Wednesday, August 28, 1907, I visited Paoli, Ind., and in company with the town health officer visited various places, as the water-works, creamery, alleys, streets, courthouse, jail, and many private grounds, and found Paoli in very good condition. The streets are clean, well kept; creamery clean and sanitary in every particular. The alleys and rear yards need cleaning of accumulated garbage and weeds, and so ordered. The courthouse is well kept and clean; the courthouse closets are in good condition and clean and sanitary. The town and county health officers keep good records and are reasonably diligent in collecting vital reports.

I would recommend that the town health officer be instructed to carry out the suggestions made him about weed cutting, and alley and backyard cleaning, and he be commended for his efforts to keep the town in a sanitary condition.

On Thursday, August 29, 1907, I visited Mitchell, Ind., and found that they had just a few days prior taken on the robe of a city, and that Mayor Brown had not selected his health board yet. So I made a sani-

tary survey of the hotels and streets and alleys. I ordered three closets cleansed and abandoned at three hotels, and a general cleaning around the premises. The streets and alleys are generally very good, but need weed cutting. I would recommend that a copy of our health rules and ordinance for towns and cities be sent to Mayor Brown of Mitchell.

STATE OF INDIANA,

INDIANAPOLIS.

September 30, 1907.

Dr. J. N. Hurty, Secretary State Board of Health, Indianapolis, Indiana :

Dear Sir—Your favor of the 23d inst. at hand, asking whether it is permissible for the State Board of Health to send one or more delegates to attend the annual meetings of the National Association of State Boards of Health, and to pay their traveling and hotel expenses out of the health fund.

The appropriation act of 1907 contains the following provision, p. 680 :

“Board of Health—For other expenses, such as office expenses, impure food, pollution of streams and preventing the spread of contagious and infectious diseases, the sum of \$10,000.”

In the same section, the traveling and hotel expenses of those conducting inspections are covered.

On page 685 of the Act of 1907 occurs the following :

“All appropriations herein provided, designated, and intended as and for traveling and hotel expenses for any department, officer, agent, employe, person, trustees or commissioners, other than for the Attorney-General or his assistants, or for the Indiana Jamestown exposition commission, shall be construed to mean and is hereby intended to be confined to such traveling and hotel expenses within the State of Indiana and not elsewhere.”

Your letter does not state whether the annual meeting for the present year is held within or without Indiana. However, under my construction of the statute, this fact is immaterial.

It is apparent from the section first above quoted that the “other expenses” referred to are of the same general nature as office expenses, expenses connected with enforcement of the pure food law, the prevention of pollution of waters and the arrest of diseases. All these classes relate to the performance of strictly official duties. The attendance of the Board by delegation at a national convention is not the performance of a duty imposed by law.

The expenses incurred by such attendance can not be embraced within the words “official expenses,” since the latter are clearly distinguished from traveling expenses in the section of the appropriation act immediately preceding the one in question, as well as in the appropriations for the executive department (p. 671-672), the Attorney-General (p. 673), the Department of Public Instruction (p. 675), the Factory Inspection Department (p. 678), and the Labor Commission (p. 681).

I am, therefore, of the opinion that the health fund can not be drawn upon for the purpose indicated in your communication.

You also inquire whether, under the appropriation of 1907, p. 158, for the "purchase of laboratory supplies," the same may be utilized in procuring tables, plumbing and gasfitting, necessary for supplying the laboratory with needed facilities for analytical work. The same section of the act permits the use of the \$15,000 appropriation in "meeting expenses incurred in the enforcement of this act including * * * expenses incident to the enforcement of this law." Within this broad provision I think the purchase of the equipment you mention clearly falls.

I have the honor to be,

Very truly yours,

JAMES BINGHAM,
Attorney-General.

QUARTERLY REPORT OF BACTERIOLOGICAL LABORATORY.

Total number of specimens examined, 1,246.
Sputum samples, 599; positive, 231; negative, 368.
Diphtheria samples, 93; positive, 83; negative, 10.
Typhoid samples, 353; positive, 74; negative, 279.
Malaria samples, 27; positive, 2; negative, 25.
Miscellaneous samples, 47; positive, 33; negative, 14.
Water supplies, 133; good, 49; fair, 17; bad, 47.
Milk samples, 9; bad, 9.
Urine samples, 2; feces, 1; uterine fluid, 1; ascetic fluid, 1.
Outfits of all kinds sent out, 1,875.

To the State Board of Health, Indianapolis, Ind.:

Gentlemen—I herewith submit a report of the Chemical Department of the Laboratory of Hygiene for the three-months ending September 30, 1907.

During this period five food and drug inspectors have been constantly employed on the road, and have visited seventy-seven cities and towns. In each place visited a thorough inspection of food-producing establishments, groceries, meat markets and drug stores was made. The local health officer has been visited, and so far as possible both the sanitary and corrective features of the food law have been carried out. The population of the cities and towns visited is 651,225. Twelve cities have been visited two or more times.

The total number of inspections made during the quarter was 2,092 and the results are classified as follows:

SUMMARY OF INSPECTIONS FOR JULY, AUGUST AND SEPTEMBER, 1907.

Inspections.	No.	Excel- lent.	Good.	Fair.	Poor.	Bad.
Dairies.....	67	3	13	25	8	18
Groceries.....	511	26	213	230	40	2
Meat markets and slaughter houses.....	335	18	143	109	46	19
Drug stores.....	197	23	120	49	5	0
Bakeries and candy shops.....	185	12	84	73	14	2
Hotels and restaurants.....	240	9	77	109	37	8
Canning factories.....	25	0	9	12	3	1
Bottling works, wineries and breweries.....	20	2	9	8	1	0
Poultry houses.....	9	0	1	5	2	1
Coca Cola works.....	2	0	1	1	0	0
Butter packing houses.....	2	0	0	2	0	0
Ice cream and ice factories.....	5	0	4	1	0	0
Creameries.....	3	0	1	2	0	0
Cold storage.....	2	1	1	0	0	0
Dead animal contractor.....	1	0	0	1	0	0
Fruit stand.....	1	0	1	0	0	0
Pasteurizing station.....	1	1	0	0	0	0
Sorghum works.....	1	0	1	0	0	0
Total.....	1,607	95	678	627	156	51
Number of second inspections.....	485	14	131	307	32	1
Total.....	2,092	109	809	934	188	52

The inspectors report conditions in groceries, meat markets and drug stores to be on the whole as satisfactory as could be expected at the beginning of a new era of food and drug work. Slaughter houses and dairies, on the other hand, have been uniformly bad, and many have been closed until such a time as they were put in condition suitable for use.

During the three months 159 prosecutions have been made, distributed in the various counties as follows:

Allen.....	3	Lake.....	5
Carroll.....	2	Madison.....	4
Cass.....	12	Marion.....	22
Clark.....	3	Montgomery.....	6
Clay.....	3	Monroe.....	2
Clinton.....	1	Orange.....	1
Floyd.....	11	Posey.....	1
Fountain.....	7	Putnam.....	2
Grant.....	13	Sullivan.....	9
Greene.....	3	Tippecanoe.....	1
Jackson.....	2	Vermillion.....	2
Jefferson.....	4	Vigo.....	30
Johnson.....	1	Warren.....	1

Of the entire number of cases tried in the courts, 150 defendants were found guilty and nine cases were dismissed by the judge on account of technicalities, or found not guilty. The fines and costs levied against violators of the Food and Drug Law aggregate \$2,715.25. The corps of inspectors are working satisfactorily and their work is meeting with hearty response in every city visited. Their duties as food and drug inspectors may well be supplemented after a time by a study of water supply and sewage disposal conditions.

FOOD AND DRUG ANALYSES.

During the quarter 830 samples of food products were analyzed, 733 samples of which were pure and 104 adulterated, indicating a percentage of adulteration equivalent to 12.4. This is a remarkable improvement over the work of last year, and is directly attributable to the passage of the Pure Food and Drug Law.

The percentage of adulteration in milk samples amount to only 6.2%; of vinegars, 39%; of butters, 20%; of extract of vanilla, 5.5%.

FOOD ANALYSES.

Article.	Pure.	Adulterated.	Per Cent.
Butter	25	6	20.0
Canned fruits	7	0	00.0
Cream	16	3	15.8
Cream tartar	2	1	33.3
Extract lemon	5	7	58.3
Extract vanilla	51	3	5.5
Extracts, miscellaneous	2	0	0.0
Ice cream	60	20	25.0
Jelly	1	0	0.0
Lard	66	12	15.4
Meat products	41	3	7.0
Milk	331	22	6.2
Mother's milk	4	0	0.0
Olive oil	26	0	0.0
Spices	0	1	100.0
Spirituuous liquors	18	2	10.0
Summer drinks	40	4	9.1
Syrup	2	0	0.0
Vinegar	25	16	39.0
Miscellaneous	11	4	26.1
Totals	733	104	12.4

Two hundred and six samples of drugs were analyzed, 112 of which were found to be pure and 94 adulterated, indicating a percentage of adulteration equivalent to 45.6. The conditions in the drug trade are still extremely unsatisfactory, and it is evident that vigorous prosecution of druggists whose goods are not up to U. S. P. requirements must be carried on before conditions will be greatly improved. Sixty-eight per cent. of the spirits of camphor were below strength; 39 per cent. of the lime waters were below standard; 54.3 per cent. of the tr. of Iodine; 63 per cent. of the tr. of Iron. It has been our desire to afford the druggists every opportunity to raise the standard of their preparations, and wherever goods have fallen below the U. S. P. strength we have sent them a warning notice calling attention to the quality of their goods and asking for an explanation. The trade takes very kindly to this method of work, and yet conditions do not improve. Whereas it has been up to this time our policy to prosecute druggists only when their goods fell below 50 per cent. U. S. P. strength, it is apparent that we shall be obliged to hold them to the letter of the law, if we are to secure an improvement.

DRUG ANALYSES.

Article.	Pure.	Adulterated.	Per Cent.
Alcohol	4	1	20.0
Arnica	13	0	0.0
Bay rum	7	0	0.0
Es. ginger	4	1	20.0
Es. peppermint	1	0	0.0
Glycerine	1	0	0.0
Lime water	16	10	39.0
Oil cloves	1	0	0.0
Precipitated sulphur	1	5	83.3
Spirits camphor	8	17	68.0
Sweet spts. nitre	1	0	0.0
Tr. capsicum	10	17	63.0
Tr. ginger	3	2	40.0
Tr. iodine	21	25	54.3
Tr. iron	7	12	63.1
Witch hazel	5	0	0.0
Miscellaneous drugs	9	4	44.4
Total	112	94	45.6

WATER ANALYSES.

During the quarter ending September 30, 1907, 295 samples of water were analyzed. Two hundred and forty-three of these samples were from either shallow or deep wells, and of the entire number 108 were classed as in good condition and potable and 96 were so badly polluted as to be unsuitable for drinking and domestic purposes, and 39 were in that condition usually designated as of "doubtful quality." Fifteen of this last class were duplicate results on the Noblesville water supply.

Of the seventeen stream supplies, eleven were potable and two were seriously polluted. Four pond or surface waters were examined and all were found to be pure. Of thirteen spring waters analyzed, six were potable, three were polluted and four were of doubtful quality. Eight cistern waters were analyzed; three were satisfactory and five were condemned because of the presence of polluted surface water. The two distilled waters were both satisfactory.

In addition to this work something has been done in the way of complete chemical analyses of certain ground waters collected and sent to the laboratory by the United States Geological Survey. While this work is of little apparent worth at the present time, I believe we should continue to co-operate with the Geological Survey in their study of Indiana waters and trust to the future to show the value of the work.

The analyses reported are all of the class known as sanitary chemical analyses and include the determination of such chemical factors as are considered indexes of pollution. In addition a presumptive test for bacteria of the colon type is always made on a 5 cu. c. sample of the water. This test is by no means a conclusive test and should not be so considered, but a negative result is of great value in checking up the chemical analyses. It is to be hoped that in the near future the laboratory

will be in a position to make as careful bacteriological studies of all the water supplies investigated as it is now doing in a chemical way.

Respectfully submitted,

H. E. BARNARD.

DR. RUCKER'S RESIGNATION.

To the State Board of Health:

Gentlemen—I hereby tender to you my resignation as director of the division of Bacteriology and Pathology of the Laboratory of Hygiene, which resignation shall come into effect before the first day of October, 1907, as your honorable body shall direct.

Respectfully,

J. B. RUCKER, Jr., M. D.

Moved, by Dr. McCoy, That the resignation of Dr. Rucker be accepted, and the secretary be instructed to find a successor, and in the meantime conduct the laboratory according to his judgment. Carried.

The coming meeting of the International Congress on Tuberculosis, to be held in Washington, D. C., in the fall of 1908, was considered, and the secretary was directed to write, have printed and to distribute a letter from the State Board, approving the said congress, and recommending the same to the people of the state. Also to prepare an exhibit for the occasion.

Consideration of rules establishing minimum standards and defining adulterations of whisky and other alcoholic liquors. After discussion, it was

Ordered, That a special meeting be held October 25th, to be called to order at 2 p. m., to hear all who wished to be heard upon the subject, and to then take such action as might be deemed proper.

After discussion it was ordered, That the secretary write a letter in the name of the Board to all holdover senators concerning the sanitary legislation that is needed.

Ordered, That any member wishing to attend the annual State charities meeting at Evansville, October 19th to 25th, could do so. Expenses to be paid.

Moved by Dr. McCoy, That the Secretary shall ask the street-car companies of the State giving transfers, to print upon the back of said transfers such facts concerning the prevention of consumption as might be deemed proper.

POSTAL CARD BIRTH CERTIFICATES.

The matter of furnishing birth certificates on postal card forms was discussed, and the final action in the matter given to the president and secretary.

SPECIAL MEETING.

October 25, 1907.

This special meeting was ordered by the Board at its regular meeting, October 11th, the object being to consider passing rules, establishing standards for liquors and to hear arguments by those interested.

Called to order by President Tucker at 2 p. m. Present: Drs. Tucker, McCoy, Davis, Wishard, Hurty.

The following-named gentlemen, all representing the liquor interests, were present: Mr. L. P. Rappaport, attorney, Indianapolis; Hon. John F. Joyce, Terre Haute; Mr. R. Lieber, Indianapolis; Mr. E. M. Babbit, Louisville; Mr. Harold Schmidt, Indianapolis; Mr. John E. Beggs, Terre Haute; Mr. W. J. Groenwoldt, Indianapolis; Mr. Victor M. O. Shaughnessy, Lawrenceburg; Mr. John Pohlman, Indianapolis.

Mr. Rappaport, attorney, made a plea that the proposed standards for liquors adopted by the U. S. authorities be not adopted at this meeting of the Indiana State Board of Health, but that the matter be postponed until such time as the U. S. authorities took definite action. A large number of letters from the pure food authorities of other States were presented, in which the writers declared their intention of not acting in the matter of establishing liquor standards until the definite action of the U. S. authorities was known.

Arguments for the above contention were made by Mr. John E. Beggs, Mr. R. Lieber, Mr. Joyce and Mr. Babbitt. The last-named gentleman was given permission by the Board to make an argument against the adoption of the U. S. standards. Attorney Rappaport made an extended argument.

In executive session, after all who wished to speak had been heard, and after full consideration, the following motion by Dr. Wishard was unanimously adopted, as an order.

Ordered, The secretary shall ask an opinion from the attorney-general as to the following points of law:

(a) Does the State pure food law empower the State Board of Health to define a food, a drug or a spirituous liquor?

(b) Do spirituous liquors, under the pure food law, belong to the class of foods or the class of drugs?

(c) In a rule regulating minimum standards, would a definition of a liquor made therein in any way invalidate the rule?

Moved by Dr. Davis, That further consideration of the matter of defining liquors and establishing minimum standards be indefinitely postponed, the Board to meet upon call of the secretary.

Carried.

REPORT
OF
The Chemical Department
LABORATORY OF HYGIENE

Year Ending September 30, 1907

H. E. BARNARD, B. Sc.,
Chemist in Charge and State Food and Drug Commissioner.

H. E. BISHOP, B. Sc.,
Food Chemist.

I. L. MILLER, B. A.,
Drug Chemist

NORRIS THOMPSON,
Ass't Chemist.

WM. D. MCABEE,
Ass't Chemist.

SECOND ANNUAL REPORT OF THE WORK OF THE CHEMICAL DEPARTMENT OF THE LABOR- ATORY OF HYGIENE.

BY H. E. BARNARD, B. SC.

The health and wealth of citizens are each equally to be safeguarded. The attainment of these ends is the object for which the State Laboratory of Hygiene was established, and this report is an attempt to transfer to paper and to express by words and figures what the department has accomplished during the year ending September 30, 1907. It is impossible to do this either fully or accurately. Recorded lists of analyses made, of prosecutions instigated or of sanitary improvements obtained, but partially express the scope of the work and fail in a great measure to show its most valuable feature—the increased public interest in the character of the food, drug and water supply.

Laboratory work is valuable either as it determines facts or makes practical the application of these facts to the public betterment. It has been the aim of the department both to arrive at existing conditions and to point the way to more satisfactory situations along the lines limited by the scope of its work.

The study of public and private water supplies commenced at the establishment of the laboratories in 1905, has been continued. The results obtained are similar to those already published and establish the fact that a large percentage of the population of the State is depending for its water for drinking and domestic purposes upon polluted supplies. At the present time about 30 per cent. of the population is supplied with a public water service, the character of which is regulated wholly by the company supplying the water. The remainder, living on the farms and in the small communities scattered everywhere over the State, depend upon private supplies which are almost without exception the dug or driven well. Although the contrary opinion is most frequently held, the public supply is far safer than the individual well. It is true, however, that the corporation or municipality selling water to a householder is more careful of the character of the supply than is the user of water from an isolated well, and, as a result of

this watchfulness, the water drawn from the tap of a service pipe is more wholesome than that dipped from the dug well or raised by the pump from a bored or driven well.

For years to come more than half of the population will be dependent on the private supply, the character of which becomes a subject for thought only when illness calls attention to probable pollution. It is impossible to study the composition of water from more than half a million wells. Occasional help may be afforded the puzzled health officer who is unable to explain enteric epidemics, and assistance given the farmer who has learned to appreciate the value of pure water, but the problem of the isolated householder cannot be solved by the State except in so far as it is possible for the laboratory to teach the necessity for pure water and to give information that will help to obtain it.

The problem of the laboratory control of public supplies is, on the contrary, a comparatively simple one and has already been given some attention. That there is a decided need for work along this line is shown by the fact that of 142 samples from public supplies examined during the year, 55 or 38.7 per cent. were in some way not of normal character and were either receiving sewage or were contaminated by either vegetable or mineral waste products. The present laboratory equipment is insufficient to admit of the best results along the lines of water chemistry and bacteriology, and more room is urgently needed for the development of this department.

The work of the food and drug laboratories has been greatly increased as a result of the passage of the Pure Food and Drug Law, which took effect March 4, 1907. This law differs but little from the Pure Food and Drug Law enacted in 1899. The principal difference is that the new law does not recognize ignorance or lack of knowledge of the character of the goods supplied the consumer, as a valid excuse for violation of the law. The old law required the State to prove wilful violation, the new law insists that the seller assume all the responsibility for the character of the goods he sells. This provision of the law makes it an effective instrument with which to suppress adulteration and the results of the first eight months' work have shown the law to be effective and salutary in every respect. This law modified in many ways the law under which the laboratory has been working and placed larger funds with which to work in our hands. The results of the analyses of food samples indicates a greatly changed condition of affairs in

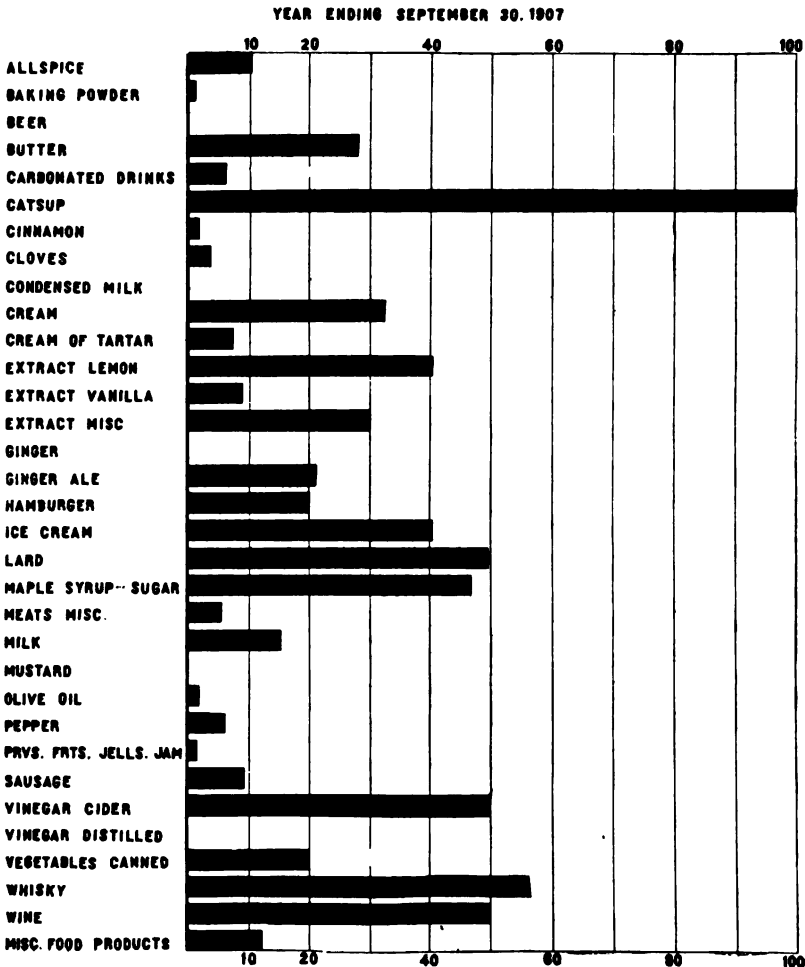
the last year. Not only has the percentage of adulteration dropped perceptibly, but it is becoming more and more difficult to find samples that may even be suspected of being impure. This condition is largely attributable to the passage of the Federal Food Law, which has compelled manufacturers to eliminate impure goods from all shipments intended for interstate trade. The manufacturers within this State, although not obliged to conform to the Federal law so far as it concerns the goods manufactured and sold within the State, have in every case that has come to our notice made and shipped the same high grade goods to their customers at home that they have sent to the trade outside the state. The new Food and Drug Law differs but little from the Federal law, and manufacturers whose goods are suitable for interstate trade find no difficulty in complying with the Indiana law, both as regards composition and form of label. There is still some doubt among manufacturers as to the proper way in which their goods should be labeled, but we have never found a case where there has been any attempt to disobey or evade the provisions of the State or Federal law. Many old goods are still on hand, both in groceries and drug stores, but these stocks have in most instances been properly labeled, and under such conditions are passed by the food inspectors. The purpose of the Food and Drug Law is, we believe, to secure uniform purity in food and drug products, and to maintain a high grade of excellence in these goods without bringing hardship to either the manufacturer or retailer. It is not our purpose or desire to condemn and destroy food products which have been sold without restraint for years, because they violate in some technical way, either as to labeling or ingredients, the provisions of the new Food and Drug Law. Whenever such goods are so marked that the label indicates what they are, and when it is clear that they have been manufactured before the present law went into effect, their sale will be allowed. All goods manufactured or shipped into the State since the passage of the law, and all goods now being packed, will be required to conform strictly to the law. We believe this ruling is well understood by the food and drug trade, and that all uneasiness and apprehension which may have been felt at the time of the passage of the law, has now passed away. No evidence has come to our notice of any attempt on the part of manufacturers and wholesalers within the State to do other than comply with the letter of the law.

During the year 2,323 samples of food products, collected by the inspectors or sent in by health officers, have been analyzed. Of

this number 1,838 samples have been pure and 485 have not conformed to the legal standard of strength, or have borne misleading labels. This is equivalent to a percentage of adulteration of 20.8 per cent. The percentage of adulteration during 1906 was 42.3 per cent. Upon this basis of comparison the passage of the new Pure Food Law and its enforcement has resulted in a diminution in the quantity of adulterated food sold of 50.8 per cent.

The following summary gives in detail the character and variety of the work done, and the results:

PERCENTAGE OF ADULTERATION OF FOOD PRODUCTS IN INDIANA



RESULTS OF ANALYSES OF FOOD SAMPLES.

Articles Examined.	Good.	Bad.	Total.	Per Cent. of Adul- teration.
Allspice.....	43	5	48	10.5
Baking powder.....	8	1	9	1.1
Beer.....	14	0	14	0.0
Butter.....	85	33	118	27.9
Carbonated drinks.....	34	2	36	5.5
Catsup.....	0	7	7	100.0
Cinnamon.....	59	1	60	1.7
Cloves.....	27	1	28	3.6
Condensed milk.....	7	0	7	0.0
Cream.....	25	12	37	32.4
Cream of Tartar.....	38	3	41	7.3
Extract, lemon.....	25	17	42	40.5
Extract, vanilla.....	50	5	55	9.1
Extract, miscellaneous.....	7	3	10	30.0
Ginger.....	18	0	18	0.0
Ginger ale.....	7	2	9	22.0
Hamburger.....	24	6	30	20.0
Ice cream.....	103	70	173	40.4
Lard.....	90	89	179	49.7
Maple syrup and sugar.....	25	22	47	46.8
Meats, miscellaneous.....	51	3	54	5.5
Milk.....	638	116	754	15.3
Mustard.....	18	0	18	0.0
Olive oil.....	52	1	53	1.8
Pepper.....	85	5	90	5.5
Preserves: Fruits, jellies, jams.....	11	2	13	1.5
Sausage.....	147	15	162	9.2
Vinegar, cider.....	44	43	87	49.4
Vinegar, distilled.....	9	0	9	0.0
Vegetables, canned.....	16	4	20	20.0
Whisky.....	4	5	9	55.5
Wine.....	2	2	4	50.0
Miscellaneous food products.....	72	10	82	12.1
Total.....	1,838	485	2,323	20.8

MILK.

During the year 754 samples of milk have been analyzed, 116 of which, or 15.3 per cent., were adulterated or below the legal standard. These high figures are due to several conditions. Milk producers and distributors are still occasionally employing preservatives, either borax or formaldehyde; shortage of milk is sometimes the cause for the addition of water in an endeavor to make the supply meet the demand; the fat content is frequently below standard because of the fact that dealers take off a portion of the cream for favored consumers, and sell the remainder of the can for pure milk. These conditions, however, are but seldom met with, and so far as wilful violation of the law is concerned, we believe that as a class the farmers of the State do not attempt or wish to sell a milk that is not in full compliance with the law. From a sanitary standpoint, however, the milk supply is subject to most serious criticism. While coffee is graded according to a hundred different brands and sold at prices varying from ten cents to fifty cents a pound, the milk consumer appears to be satisfied with but one grade of milk

for which but one price must be paid. Consequently, the farmer producing sanitary high grade milk is compelled to sell his product in competition with that of the most slovenly and careless dairyman. The result has been that the milk producing industry has never set quality for its motto, but has used every effort to increase the quantity and lower the cost of production of its product.

Farmers engaged in the production of milk have apparently no idea of sanitation, and although the herds are well kept up and consist for the most part of high grade cows, producing milk above the average quality, yet the stables, milkhouses and all the details necessary for cleanly milk are neglected or but poorly observed. In many instances dairies are operated on leased farms. The buildings are dilapidated, and shiftlessness and poverty are apparent. It becomes a difficult matter for dairy inspectors to condemn buildings and close the business of milkmen who have invested their entire savings in a dairy, and it is particularly hard to do this when, because of the avarice of landlords, it is impossible to secure necessary repairs on the buildings. The health of the citizen of the State is of more importance, however, than the welfare of the individual farmer, and if the milk cannot be produced under sanitary conditions, it must not be produced at all. The plea of poverty and the refusal of the landlord to better conditions cannot be accepted as an explanation for unsanitary milk production. If it is impossible for the dairy interests at the present time to produce milk in a sanitary manner to retail at present prices, is it not advisable for the consumer to give the farmer such a price for his product that he can afford to abandon his present method of milk production, and produce clean, wholesome milk? Dr. Chas. Harrington, Secretary of the State Board of Health of Massachusetts, who has been conducting a crusade against dirty milk, has this to say of the situation: "The remedy is simple. We should insist upon clean milk and be willing to pay for it; encourage the production of a sanitary supply and refuse to buy excrement and pus; buy of the man whose supply costs a cent or two more a quart to produce, and let the sloven learn that cleanliness is an asset and filth a heavy load to carry."

MILK ANALYSES BY CITIES AND TOWNS.

Locality.	Total Number of Samples Collected.	Number Above Standard.	Number Below Standard.	Per Cent. Below Standard.	Per Cent. Total Solids in Lowest Sample.	Per Cent. Fat in Lowest Sample.
Anderson.....	6	4	2	33.3	11.73	2.2
Bedford.....	11	11	0	0.0	.....	.....
Bloomington.....	13	11	2	15.3	11.07	.....
Brasil.....	7	6	1	14.2	.....	2.5
Brooklyn.....	2	2	0	0.0	.....	.....
Columbus.....	16	13	3	18.7	10.3	2.9
Connersville.....	9	8	1	11.1	.....	3.1
Crawfordsville.....	26	16	10	38.4	12.07	2.8
Crown Point.....	2	2	0	0.0	.....	.....
Danville.....	3	1	2	66.6	11.06	2.8
Delphi.....	4	4	0	0.0	.....	.....
East Chicago.....	4	3	1	25.0	.....	2.8
Elwood.....	5	4	1	20.0	11.63	2.9
Evansville.....	47	44	3	6.3	11.28	2.2
Fort Wayne.....	5	5	0	0.0	.....	.....
Frankfort.....	13	6	*7	53.8	.....	3.0
Gary.....	5	5	0	0.0	.....	.....
Goshen.....	1	1	0	0.0	.....	.....
Greencastle.....	9	9	0	0.0	.....	.....
Greenfield.....	3	3	0	0.0	.....	.....
Hammond.....	41	33	8	26.6	11.72	1.2
Huntington.....	1	1	0	0.0	.....	.....
Indianapolis.....	128	120	8	6.2	11.41	1.4
Jeffersonville.....	9	7	2	22.2	9.93	2.6
Kokomo.....	15	11	4	26.6	5.00	.6
Lafayette.....	4	0	*4	100.0	.....	.....
Lagrange.....	1	1	0	0.0	.....	.....
Lawrenceburg.....	4	4	0	0.0	.....	.....
Lebanon.....	1	1	0	0.0	.....	.....
Linton.....	4	4	0	0.0	.....	.....
Logansport.....	21	15	6	28.5	.....	1.2
Madison.....	13	8	5	38.4	.....	2.8
Marion.....	18	12	6	33.3	9.38	1.0
Martinsville.....	5	5	0	0.0	.....	.....
Michigan City.....	11	11	0	0.0	.....	.....
Mooresville.....	19	19	0	0.0	.....	.....
Muncie.....	20	19	1	5.0	.....	3.1
New Albany.....	52	42	10	19.0	5.54	2.9
North Salem.....	1	0	1	100.0	.....	.....
Peru.....	8	8	0	0.0	.....	.....
Plainfield.....	5	4	1	2.0	.....	3.1
Plymouth.....	2	2	0	0.0	.....	.....
Princeton.....	2	2	0	0.0	.....	.....
Richmond.....	13	10	3	23.0	.....	2.8
Rochester.....	1	1	0	0.0	.....	.....
Rushville.....	3	3	0	0.0	.....	.....
Salem.....	1	1	-0	0.0	.....	.....
Shelbyville.....	16	13	3	18.7	10.51	2.8
South Bend.....	95	87	8	8.4	.....	3.0
Terre Haute.....	19	8	*11	57.8	.....	2.4
Thorntown.....	1	1	0	0.0	.....	.....
Tipton.....	3	3	0	0.0	.....	.....
Vincennes.....	7	7	0	0.0	.....	.....
Washington.....	2	2	0	0.0	.....	.....
West Newton.....	5	5	0	0.0	.....	.....
Whiting.....	6	4	2	33.3	10.87	2.5
Williamsport.....	4	4	0	0.0	.....	.....
Worthington.....	2	2	0	0.0	.....	.....
Fifty-eight cities.....	754	638	116	15.3+	.....	.....

*Samples contained much dirt.

CREAM.

Thirty-seven samples of cream were analyzed, of which twelve, or 32.4 per cent. were classed as adulterated. This is due to the fact that the fat content fell below 18 per cent., the legal standard. A large quantity of cream is evidently still sold that should be classed as rich milk rather than as cream. We have found no evidences of cream thickeners such as viscogen, gelatin, etc., having been used.

CREAM—LEGAL.

Lab. No.	Retailer.	Fat Per Cent.
8401	Peter Eckersley, Muncie	30.00
8734	C. W. Trout, Logansport	20.50
8747	Ray & Arnold, Logansport	27.00
8904	Ballard Ice Cream Co., Indianapolis	27.00
8906	Ballard Ice Cream Co., Indianapolis	20.50
8908	H. O. Buzzard, Bloomington	25.60
8909	H. O. Buzzard, Bloomington	19.00
8917	Dr. Bond, Richmond	25.00
8919	Dr. Bond, Richmond	22.25
9320	Marion	20.00
9417	Paul Adams, Indianapolis	21.00
9464	C. L. Hadley, Indianapolis	18.00+
9481	F. Altum, Indianapolis	23.00
9506	P. M. Adams, Indianapolis	19.00
9554	Trogden & Allen, Mooresville	20.00
9553	Brown & New, Plainfield	21.10
9564	R. C. Townsend, Mooresville	21.00
9588	Charles L. Bray, Valley Mills	19.00
9589	Black & Adams, Brooklyn	27.00
10149	D. F. Maish, Frankfort	18.00
10151	Ris Percy, Frankfort	18.00
10160	A. N. Daywatt, Frankfort	18.00
10876	Minton & Strodling, Muncie	24.80

CREAM—ILLEGAL.

Lab. No.	Retailer.	Fat.	Remarks.
7112	James Gaul, Anderson	15.0	Adulterated and below standard.
7396	Richmond Cream Co., Richmond	18.5	Guaranteed to be 20 %.
7495	W. N. Trullender, Muncie	17.0	Below standard.
7542	Indianapolis	16.1	Below standard.
8178	Valparaiso	15.5	Formaldehyde present in large quantities.
8514	Charles Prang, Ft. Wayne	17.0	Below standard.
9020	Louis H. Long, Terre Haute	17.8	Below standard.
9265	Clover Leaf Creamery, Marion	16.0	Below standard.
9480	C. L. Hadley, Plainfield	14.0	Below standard.
9565	C. L. Hadley, Plainfield	14.0	Adulterated.
10365	O. P. Jones, Muncie	15.6	Below standard.
10369	S. D. Frier, Muncie	16.8	Below standard.
10233	Chamberlain & Son, Lafayette	22.0	Much dirt present.
10236	M. Chamberlain & Son, Lafayette	29.0	Much dirt present.

BUTTER.

Of the 118 samples of butter analyzed, 85 have been pure and 33 adulterated. This is equivalent to an adulteration of 27.9 per cent. These figures include the results of an examination of the character of butters served in restaurants in the city of Indianapolis, where of 71 samples collected, 31 were found to be not butter but oleomargarine. There is still a great deal of oleomargarine and renovated butter sold under the name of butter in spite of the rigid Federal laws. The price of butter has been uniformly high throughout the year, and the temptation of the unscrupulous dealer to substitute a product which he can buy cheaply and sell at a high price has been great. There is evidently some butter on the market to which oleomargarine has been added in small quantities, and it is apparent that if the present prices of butter continue, the incentive to fraud will be maintained.

BUTTER—LEGAL.

Lab. No.	Retailer.	Butyro Reading at 40° C.	Reichert-Meissl Number.
6997	J. M. Carvin & Son, Indianapolis.	42.15	23.4
6999	Columbia Grocery Co., Indianapolis.	42.60	23.6
7000	Indianapolis.	41.00	25.2
7001	Mrs. M. J. Gurley, Indianapolis.	42.35	24.8
7005	J. M. Williamson, Indianapolis.	42.70	22.8
7006	Standard Tea & Coffee Co., Indianapolis.	43.00	22.8
7009	Cook Co., Indianapolis.	40.30	31.4
7017	C. H. & E. H. Schrader, Indianapolis.	41.40	24.2
7026	Indianapolis.	42.00	23.6
7054	Glick Sons, Indianapolis.	42.00	22.2
7056	F. G. Chadwick, Indianapolis.	42.85	19.8
7060	Stand No. 14 Market House, Indianapolis.	42.40	24.8
7061	Stand No. 248 Market House, Indianapolis.	42.45	23.0
7062	Stand No. 75 Market House, Indianapolis.	41.90	25.0
7063	Cobb & Tracy, Indianapolis.	43.15	22.0
7064	W. W. Day, Indianapolis.	41.75	24.4
7065	E. V. Darnell, Indianapolis.	42.30	23.0
7067	Mrs. S. M. Miller, Indianapolis.	41.70	24.0
7075	Benj. C. Swan & Son, Indianapolis.	42.60	24.4
7076	Harry A. Marley, Indianapolis.	42.80	24.2
7110	Moore Grocery Co., Indianapolis.	43.00	19.4
7111	B. B. Petit, Anderson.	41.60	23.8
7124	Gus Vergang, Indianapolis.	43.00	23.4
7197	Thorntown.	42.30	
7300	Bee Hive Grocery Co., Richmond.	43.00	26.6
7301	Richmond Cream Co., Richmond.	43.00	26.1
7468	Indianapolis.	42.80	28.6
7623	Mrs. F. T. Smith, Indianapolis.	43.35	23.4
7667	Louis Valnits, Indianapolis.	41.90	27.6
7668	A. Spreng, Indianapolis.	41.00	25.8
7765	Stegemeier Bros., Indianapolis.	42.50	27.6
7812	L. S. Ayres & Co., Indianapolis.	41.8	26.1
7833	Taggart, Indianapolis.	43.0	29.2
7835	Glen Alba, Indianapolis.	42.4	26.7
7840	Marion Cafe, Indianapolis.	42.2	27.6
7842	Wm. H. Smith, Indianapolis.	43.0	27.1
7843	Frank V. Schrottky, Indianapolis.	43.0	28.0
7910	J. W. Cunningham, Indianapolis.	42.3	29.4
8131	J. M. Kenady, Irvington.	41.65	27.1
8136	Barnes & Marshall, Whitesboro.	41.25	27.4
8141	Wm. D. McGuire, Zionsville.	43.7	29.5
8181	Busy Bee Restaurant, Indianapolis.	42.45	
8182	Baltimore Dairy Lunch, Indianapolis.	42.4	30.6

BUTTER—LEGAL—Continued.

Lab. No.	Retailer.	Butyro Reading at 40° C.	Reichert-Meissl Number.
8185	Taggart, Indianapolis	42.65	26.3
8187	Claypool Cafe, Indianapolis	42.3	25.6
8232	Joan Hammond, Evansville	41.75	28.5
8242	Wm. E. Burgess, Kirklín	43.5	28.4
8248	Richard C. Garham, Kirklín	42.8	35.6
8270	Sharpe & Morris, Dayton	41.8	30.6
8357	Schrader, Indianapolis	41.7	29.3
8469	Alva Wellman, New Albany	42.6	25.1
8486	Chas. Elmier, Logansport	42.7	27.6
8480	Louis Diechmann, Logansport	43.3	25.8
8740	F. W. Klein, Logansport	42.7	28.3
9272	W. J. Bick, Marion	44.3	26.8
9098	John Fissel & Co., Ft. Wayne	43.2	25.4
9095	Harry Hockemeir, Ft. Wayne	42.7	27.4
9096	Henry Hockemeir, Ft. Wayne	44.3	25.6
9000	J. P. Hinton, Ft. Wayne	44.5	26.4
9101	J. A. Riley, Ft. Wayne	43.7	26.0
9104	J. B. Welten, Ft. Wayne	43.3	27.3
9105	John Vodermarks, Ft. Wayne	42.4	29.5
9106	Dittoe Grocery Co., Ft. Wayne	44.6	25.2
9107	Oscar Wobock, Ft. Wayne	44.6	27.8
9108	D. M. Koble, Ft. Wayne	44.4	27.4
9109	Val Hartman, Ft. Wayne	44.5	28.6
9110	Kennedy & Darby, Ft. Wayne	42.4	28.9
9111	T. W. Scobold, Ft. Wayne	43.1	27.5
9137	Kelly & Allman, Peru	43.2	27.6
9145	S. W. Smith, Peru	43.7	25.0
9152	Glennon & Wendt, Peru	43.1	28.8
9267	J. W. Monaghan, Marion	44.4	25.5
9268	Denison Hotel Co., Marion	44.5	28.1
9269	Turner Overman, Marion	44.3	29.1
9271	George A. Keffer, Marion	45.0	30.4
9273	Wm. Hilsamer, Marion	43.0	28.5
9279	Homer Watson, Marion	42.7	26.8
9656	F. Haessler & H. Cretter, Connersville	41.8	28.5
9663	M. Wenger & Son, Connersville	42.8	24.6
9776	L. T. Smith, South Bend	42.8	25.1
9796	Brodbeck Bros., South Bend	43.4	25.9
9803	Salinger Bros., South Bend	42.9	27.8
9963	The Traders' Palace Grocery, Plymouth	43.7	24.6
10079	R. A. Ebert, Michigan City	43.6	24.7
10338	Dr. J. Cooperider, Madison	42.9	26.3

BUTTER—ILLEGAL.

Lab. No.	Dealer.	Butyro Reading @ 40° C.	Reichert-Meissl Number.	Remarks.
7785	Mrs. Elisabeth Anglus, Evansville	48.3	1.40	Oleomargarine.
7838	Ryker's Restaurant, Indianapolis	49.0	.86	Oleomargarine.
8124	—, South Bend	49.25	.94	Oleomargarine.
8186	—, Indianapolis	50.0	1.05	Oleomargarine.
7003	Nathan B. Groff, Indianapolis	49.55	1.12	Oleomargarine.
7830	Joe's Restaurant, Indianapolis	50.3	1.24	Oleomargarine.
7107	Mrs. E. P. Reiklin, Indianapolis	47.0	8.20	Oleomargarine.
7836	Miles Restaurant, Indianapolis	52.15	.79	Oleomargarine.
8183	Horace Haynes, Indianapolis	48.5	1.58	Oleomargarine.
7831	Little Denison, Indianapolis	51.5	1.14	Oleomargarine.
7770	Bond's Restaurant, Indianapolis	49.1	1.43	Oleomargarine.
8195	"Abe Martin" Restaurant, Indianapolis	48.6	2.14	Oleomargarine.
8184	The Oak, Indianapolis	51.3	.84	Oleomargarine.
8193	National Restaurant, Indianapolis	51.5	.96	Oleomargarine.
8190	Norman Restaurant, Indianapolis	49.2	1.04	Oleomargarine.
7841	Thayer's Restaurant, Indianapolis	52.35	.51	Oleomargarine.
7837	Smith's Restaurant, Indianapolis	48.50	1.91	Oleomargarine.
8191	Princeton Hotel and Restaurant, Indianapolis	48.9	1.22	Oleomargarine.
7844	Romo's Cafe, Indianapolis	51.8	1.18	Oleomargarine.
7834	Schiffman Coffee House, Indianapolis	51.8	1.56	Oleomargarine.

BUTTER—ILLEGAL—Continued.

Lab. No	Dealer.	Butyro Reading @ 40° C.	Reichert- Meissl Number.	Remarks.
7829	B. M. Covert, Indianapolis.....	49.0	1.24	Oleomargarine.
8192	Illinois Cafe, Indianapolis.....	49.3	4.10	Oleomargarine.
8194	Born's Restaurant, Indianapolis.....	48.35	1.25	Oleomargarine.
7839	Born's Restaurant, Indianapolis.....	49.2	.94	Oleomargarine.
7832	Foster-Fowler Restaurant, Indianapolis.....	49.0	.79	Oleomargarine.
7813	Merchants' Restaurant, Indianapolis.....	51.9	.46	Oleomargarine.
6984	J. M. Williamson, Indianapolis.....	42.50	19.00	Mixed with oleomargarine.
6985	 Indianapolis.....	49.10	2.00	Oleomargarine.
6998	Chas. Rallsback, Indianapolis.....	48.05	5.60	Oleomargarine.
7002	Mont. Williamson, Indianapolis.....	48.65	.66	Oleomargarine.
7004	Wm. H. Eliker, Indianapolis.....	49.60	1.23	Oleomargarine.
7108	Mary E. Doolittle, Indianapolis.....	48.20	6.40	Oleomargarine.
10231	American Dairy Co., Indianapolis.....	46.10	8.22	Oleomargarine.

OLEOMARGARINE.

But five samples of oleomargarine have been analyzed, all of which have been pure. The use of oleomargarine as a butter substitute is on the increase, but manufacturers have at last begun to realize the great value of their product as a legitimate article of food. While it has been sold largely in years past, much of it has not been sold under its true name, but under the guise of butter. Now that its value as a wholesome and cheap substitute for butter is becoming well known, it is evident that it will find an ever-increasing demand under its true name.

CONDENSED MILK.

All of the seven samples of condensed milk analyzed were pure. There is still some old stock on the market labeled "Evaporated Cream," but all new goods are properly branded. It is an interesting fact that condenseries manufacturing condensed milk products insist upon a far higher grade of milk than do the consumers, in spite of the fact that all condensed milk is thoroughly sterilized by heat, while the consumer generally uses his milk raw. The fact that the condensory can obtain from the dairyman a high grade milk free from odor and filth, and with a low bacterial count, simply by insisting that only such milk shall be delivered at the factory platform, is an indication of what may be obtained in the way of improvement from the producer of dairy milk.

CONDENSED MILK—LEGAL.

Lab. No.	Brand.	Manufacturer.	Per Cent. Fat.	Per Cent. Fat in Original Milk.	Solids.	Ash.	Number of Times Condensed.
7771	Highland.	Helvetia Milk Con. Co., Highland, Ill.	9.0	4.20	31.50	1.5	2.14
7773	Van Camp's.	Van Camp Packing Co., Indianapolis.	8.0	3.74	32.00	1.5	2.14
7774	Star.	Michigan Condensed Milk Co., N. Y.	7.7	3.62	29.80	1.5	2.14
7775	Pet.	Helvetia Milk Con. Co., Highland, Ill.	8.0	3.74	29.53	1.5	2.14
7779	Modimilk.	Inland Milk Lab. Co., Indianapolis.	14.0	7.77	42.50	1.25	1.8
7772	Eagle.	Bordens Cond. Milk Co., New York.	10.8	4.39	92.56	1.72	2.46
8444		Indianapolis.	10.4	3.15	41.81	2.36	3.3

ICE CREAM.

The standard of ice cream for this State reads as follows: "Ice cream is a frozen product containing not less than 8 per cent. of butter fat and 18 per cent of milk solids, with the addition of sugar (sucrose) and with or without natural flavoring and not to exceed seven-tenths of one per cent. of gelatine." This standard was adopted after consultation with manufacturers representing a large proportion of the trade in the State, and while the fat standard is much below that required by the Federal statute, yet it is sufficiently high to insure a wholesome and palatable product. When it appears that the standard is one suggested by the manufacturers themselves as being entirely fair to the trade and to the consumer, it is surprising to find that of the 173 samples analyzed but 103 were up to standard, while 70, or 40.4 per cent., were below standard. These results evidently indicate an indisposition on the part of the manufacturer to abide by standards adopted at his own request.

ICE CREAM—LEGAL.

Lab. No.	Manufacturer or Dealer.	Fat Per Cent.
8225	Furnas, Indianapolis.	9.2
8322	C. W. Craig, Indianapolis.	8.4
8323	Ballard Ice Cream Co., Indianapolis.	8.0
8341	Ballard Ice Cream Co., Indianapolis.	8.4
8343	Browder Ice Cream Co., Indianapolis.	8.2
8346	Ballard Ice Cream Co., Indianapolis.	8.0
8347	New York Candy Kitchen, Marion.	12.4
8368	New York Candy Kitchen, Marion.	13.8
8404	J. Turzicki, Muncie.	8.0
8420	W. A. Heath, Lebanon.	8.7
8509	Wm. F. Geller, Ft. Wayne.	8.0
8510	Wm. F. Geller, Ft. Wayne.	8.4
8511	Collins Ice Cream Co., Huntington.	11.2
8513	John Vasenios, Ft. Wayne.	9.6
8516	Geo. T. Pantascen, Ft. Wayne.	8.0
8519	Mondamin Dairy Co., Ft. Wayne.	6.8
8594	Harry L. Sharp, Delphi.	8.0
8595	Edw. H. Danie, Delphi.	8.6

ICE CREAM—LEGAL—Continued.

Lab. No.	Manufacturer or Dealer.	Fat Per Cent.
8729	Ballard Ice Cream Co., Indianapolis.	9.2
8777	Mackley & Harkness, Terre Haute.	11.6
8811	J. D. Bess, Columbus.	10.6
8816	Demos Bros., Columbus.	8.4
8817	Ballard Bros., Indianapolis.	8.4
8819	Columbus Ice Cream Co., Columbus.	10.0
8880	Wm. Hayes, Franklin.	8.4
8881	R. C. Wood, Franklin.	8.8
8937	Buntin Drug Co., Terre Haute.	8.6
8963	Paul Scaetna, Hammond.	9.0
9050	Dora B. Smoot, Washington.	10.0
9055	Sum & Bros., Washington.	10.+
9056	Chas. H. Jones, Washington.	10.2
9057	J. Harry Drew, Washington.	11.+
9115	Clark Bros., Salem.	8.8
9116	L. E. Taylor, Salem.	11.2
9119	D. H. Ewing & Son, Salem.	8.0
9121	John B. Clarke, Salem.	10.6
7121	Jno. G. Dold, Noblesville.	8.0
7122	H. F. Heiny & Co., Noblesville.	8.0
7090	R. W. Furnas, Indianapolis.	8.0
7198	Floyd Marshall, Martinsville.	8.0
7317	Collins Ice Cream Co., Huntington.	9.2
7318	Collins Ice Cream Co., Huntington.	16.0
7399	Jersey Creamery Co., Elwood.	9.0
7452	Smith, Plainfield.	12.0
7496	J. R. Hummel, Muncie.	11.0
7497	Chas. E. Hinkley, Muncie.	11.0
7498	D. P. Campbell, Muncie.	8.+
7989	R. W. Furnas, Indianapolis.	8.4
8187	Purity Ice Cream Co., Evansville.	8.8
8168	Evansville Pure Milk Co., Evansville.	8.3
8871	Ballard Ice Cream Co., Indianapolis.	10.2
8872	Jessup & Antrum, Indianapolis.	8.0
9089	Buntin Drug Co., Terre Haute.	13.0
9162	J. Dickman, Peru.	8.0
9199	Early's Drug Store, Greenfield.	8.0
9200	Small's Drug Store, Greenfield.	12.4
9201	A. C. Pilkerton, Greenfield.	8.0
9202	— Pugh, Greenfield.	9.6
9262	A. L. Paxson, Marion.	8.0
9264	A. L. Paxson, Marion.	8.4
9388	George F. Goodbub, New Albany.	12.0
9389	Herman Kaiser, New Albany.	10.6
9389	Peter Pfeffer, New Albany.	9.6
9390	John Haffen, New Albany.	10.0
9620	Richard Floy, Shelbyville.	12.0
9621	H. Hagerhorst, Shelbyville.	11.0
9622	Mike Switow, Shelbyville.	11.0
9623	Charles Pittman, Shelbyville.	12.0
9633	Edward Small, Shelbyville.	11.0
9644	George Demas, Connersville.	10.5
9765	Jesse McAnally, Greencastle.	8.0
9766	Owl Drug Co., Greencastle.	10.0
9784	New York Candy Kitchen, South Bend.	12.0
9785	Noble's, South Bend.	10.0
9787	O. Mennucci, South Bend.	8.0
9788	J. Z. Turner, South Bend.	9.0
9789	H. E. Matteson, South Bend.	9.0
9822	Shannon & Fast, Brazil.	8.0
9836	Louis Nebeker, Covington.	14.0
9837	Charles Rennan, Crawfordsville.	8.0
9947	Coleman, Crawfordsville.	10.0
.....	Fosdick Ice Cream Co., Crawfordsville.	9.6
9950	W. W. Meyer, Crawfordsville.	12.0
9951	J. C. Wampler, Crawfordsville.	11.4
9962	Furnas Ice Cream Co., Indianapolis.	8.9
9965	W. D. Epperson, Lafayette.	10.0
10059	Otto Albert, Plymouth.	10.0
10061	Schlosser Bros., Plymouth.	10.8
10114	George Lensch, Michigan City.	10.0
10136	Ed. Hallett, Princeton.	14.0
10182	George Chopers, Anderson.	10.5
10183	Hughes & Jones, Anderson.	18.0
10184	W. H. Larmore, Anderson.	8.4
10115	J. Alexander, Michigan City.	9.5

ICE CREAM—LEGAL—Continued.

Lab. No.	Manufacturer or Dealer.	Fat Per Cent.
10209	Standard Ice Cream Co., South Bend.	8.8
10210	Charles Gionri, South Bend.	8.8
10211	E. Polander, South Bend.	12.0
10217	Sbragia & Bardelli, Hammond.	8.6
10218	Summer's Drug Store, Hammond.	8.4
10223	Bicknell Drug Co., Hammond.	8.4
10224	Brahos Bros., Hammond.	12.4
10225	Woodhull Ice Cream Co., Hammond.	9.2
10367	Campbell Ice Cream & Milk Co., Muncie.	11.2

ICE CREAM—ILLEGAL.

Lab. No.	Manufacturer.	Fat Per Cent.
7057	R. W. Furnas, Indianapolis.	6.4
7058	R. W. Furnas, Indianapolis.	6.9
7059	R. W. Furnas, Indianapolis.	6.0
7068	R. W. Furnas, Indianapolis.	6.0
7069	R. W. Furnas, Indianapolis.	6.8
7070	R. W. Furnas, Indianapolis.	7.0
7071	Ballard & Co., Indianapolis.	6.0
7078	R. W. Furnas, Indianapolis.	7.0
7079	Browder Ice Cream Co., Indianapolis.	6.0
7097	R. W. Furnas, Indianapolis.	6.0
7127	_____, Indianapolis.	7.2
7132	Sanders Smith, Plainfield.	3.5
7191	_____, Indianapolis.	6.8
7192	_____, Indianapolis.	6.8
7316	_____, Huntington.	4.4
7319	_____, Huntington.	4.4
7546	R. W. Furnas, Indianapolis.	6.2
8068	Evansville Pure Milk Co., Evansville.	5.4
7866	Spragial Bardette, Hammond.	7.4
8233	John Tevebaugh, Crawfordsville.	6.6
8324	Wm. & Harry Birk, Indianapolis.	7.2
8325	Kinzer, Indianapolis.	1.0
8338	Will R. Coleman, Crawfordsville.	7.0
8342	Fassati & Son, Indianapolis.	7.6
8344	Indianapolis.	7.8
8345	Stokes Bros., Indianapolis.	7.4
8402	W. H. Sverfert, Muncie.	7.0
8446	_____, Crawfordsville.	7.4
8447	_____, Crawfordsville.	7.6
8448	_____, Crawfordsville.	6.8
8572	Will Bock, Indianapolis.	6.4
8818	Lay Bros., Columbus.	7.8
8900	_____, Hymers.	4.8
8958	Fragie Bardelli, Hammond.	7.0
8961	Bicknell & Co., Hammond.	7.6
8962	Summers & Shanaole, Hammond.	7.6
9026	Sage Bros., Terre Haute.	7.0
9028	Terre Haute.	7.0
7597	Cold Storage Ice Cream Co., Marion.	5.6
8778	Greek Candy Kitchen, Terre Haute.	4.0
8779	Yeager & Rigney, Terre Haute.	5.0
8781	Vigo Commission Co., Terre Haute.	4.4
8984	Pear Ice Cream Co., Terre Haute.	3.6
8783	Furnas Ice Cream Co., Terre Haute.	6.8
8982	Buntin Drug Co., Terre Haute.	4.4
8983	Peter Georgapoulos, Terre Haute.	5.4
8780	John J. Roumeliate, Terre Haute.	7.0
8782	Jos. Alexander & Co., Terre Haute.	3.2
8778	Greek Candy Kitchen, Terre Haute.	4.0
8982	Buntin Drug Co., Terre Haute.	4.4
8783	Furnas Ice Cream Co., Terre Haute.	6.8
8984	Pear Ice Cream Co., Terre Haute.	3.6
8781	Vigo Commission Co., Terre Haute.	4.4
8779	Yeager & Rigney, Terre Haute.	5.0
7597	Marion Cold Storage & Ice Cream Co.	5.6
8364	A. A. Boller & Co., Marion.	110.8

†Starch present.

ICE CREAM—ILLEGAL—Continued.

Lab. No.	Manufacturer.	Fat Per Cent.
8365	Hildebrand & Ansley, Marion	7.6
8366	Hildebrand & Ansley, Marion	18.6
8363	Marion Ice Cream Co., Marion	8.4
9123	Guy Neal, Salem	7.6
8815	Greek Candy Co., Columbus	6.6
9160	Wm. E. Exmyer, Peru	7.4
9258	J. D. Snidera, Marion	6.2
9263	A. J. Paxson, Marion	7.6
9322	, Marion	7.6
9642	O. Elliott, Connersville	7.0
9786	E. Polador, South Bend	*14.0
9820	James Tarafonetes, Brazil	6.0
9821	Marvie Jones, Brazil	5.6
9823	Joseph Spugnardi, Brazil	6.8

*Colored pink with coal tar color..

LEMON EXTRACT.

Two classes of lemon extract are recognized as legal—those containing 5 per cent. of oil of lemon dissolved in alcohol and free from artificial color, and the so-called "Turpeneless" goods prepared by shaking oil of lemon with dilute alcohol, or by dissolving turpeneless oil of lemon in alcohol and containing not less than 2 per cent. of citral derived from oil of lemon. The character of lemon extracts has greatly improved during the year. Of 42 samples analyzed, 25 have been up to strength and true to name, and 17 have been either below standard or mislabeled. This is a great improvement over the results reported a year ago, when 85 per cent. of the lemon extracts examined were adulterated.

LEMON FLAVORING EXTRACTS—LEGAL.

Lab. No.	Manufacturer or Retailer.	Lemon Oil.	Color.
7106	Meyer Bros., St. Louis	5.1	Colorless.
7107	Meyer Bros., St. Louis	6.9	
7168	Schnull & Co., Indianapolis	5.75	Colorless.
7175	Royal Remedy and Extract Co., Dayton, O.	5.06	Colorless.
7367	J. H. Conner & Co., New Albany	7.87	Natural.
7369	, New Albany	4.18	Natural.
7440	Robertson Drug Co., Salem	7.06	Not natural.
7449	A. J. Redding, Anderson	5.62	Colorless.
7480	Wm. C. Pfau, Jeffersonville	6.25	Natural.
7518	Eddy & Eddy, St. Louis	5.62	Colorless.
7557	Jennings Flavoring Co., Grand Rapids	*	Colorless.
7559	L. D. Bryon, Mulberry	5.62	Colorless.
7634	Chas. D. Knoefel, New Albany	5.37	Natural.
7715	Firchuff Bros., Whiting	6.43	Colorless.
7968	Norris & Sieger, Frankfort	5.87	Artificial.
7983	Campbell & Masters, Lebanon	6.68	Natural.
8058*	G. W. Tepe, Evansville	0.34	Natural.
8092*	Fisher Bros., Evansville	1.00	Colorless.
8135	Markland & Harshburger, Whitestown	5.31	Natural.
8300	E. Eierhaue & Sons, Vincennes	5.93	Colorless.
8308	Dierhaue Bros., Vincennes	6.31	Not natural.
8326	Will R. Coleman, Crawfordsville	7.00	Natural.
8390†	F. Furlmeyer, Vincennes	0.43	Dinitrocresol.
8459	Moses Barnett, Evansville	7.25	Slightly colored.
9192	Fred R. Widmer, Dayton	6.66	Colorless.

*Labeled correctly "Turpeneless."

†Labeled correctly.

LEMON FLAVORING EXTRACTS—ILLEGAL.

Lab. No.	Manufacturer or Retailer.	Lemon Oil.	Color.	Remarks.
7152	Royal Remedy & Extract Co., Dayton, O.	0.18	Naphthol yellow.	Artificial.
7183	W. W. Jones, Greencastle.	1.81	Natural.	Below standard.
7218	Royal Remedy & Extract Co., Dayton, O.	0.0	Naphthol yellow.	Artificial.
7373	C. D. Knoefel, New Albany.	0.62	Artificial.	Artificial.
7469	E. R. Webster & Co., Cincinnati.	3.50	Naphthol yellow.	Below standard.
7470	Lafayette Chemical Works, Lafayette.	0.0	Tropaeolin.	Artificial.
7471	—, Indianapolis.	0.12	Naphthol yellow.	Artificial.
7553	Gem Extract Co., Frankfort.	0.0	Not natural.	Artificial.
7747	J. F. Bruning & Son, Evansville.	4.93	Colorless.	Below standard.
8007	Seeley Mfg. Co., Detroit.	0.34	Dinitrocresol.	Artificial.
7555	W. M. Shafer & Co., Frankfort.	0.18	Naphthol yellow.	Below standard.
8859	John R. Grave, Columbus.	0.25	Coal tar color.	Adulterated.
9390	L. W. Owens, Boonville.	2.81	Artificial.	Adulterated.
9768	Geo. A. Bayle, St. Louis, Mo.	0.31	Naphthol yellow.	Adulterated.
9861	Green's Pharmacy, Irvington.	1.5	Adulterated.	Adulterated.
10120	D. K. Evans & Co., St. Louis.	0.0	Coal tar color.	Mislabeled.

VANILLA EXTRACT.

We have examined 55 samples of vanilla extract and found 50 to be pure and 5, or 9.1 per cent., adulterated, below the standard or misbranded. The improvement in vanilla extract is even more marked than in the case of lemon extracts. At the present time almost no goods are found on the market not true to name, unless it is on the back shelf of the grocery store, and these old goods are rapidly being thrown away to make room for better products.

VANILLA EXTRACTS—LEGAL.

Lab. No.	Brand.	Manufacturer or Retailer.	Vanillin.	Coumarin.	Caramel.
7021		F. A. Voght, Indianapolis.	.30	None.	Present.
7031		Louis E. Haag, Indianapolis.	.0625	None.	Present.
7103	Daisy.	—, St. Louis.	.10	Present, labeled correctly.	Present.
7104	Perfect.	—, St. Louis.	.125	None.	Present.
7119		A. G. Baldwin, Noblesville.	.05	None.	Present.
7117		H. E. Heiny, Noblesville.	.18	None.	Present.
7169		O. E. Tower, Martinsville.	.242	None.	None.
7219	Souders.	Royal Remedy & Extract Co., Dayton, O.	.10	None.	None.
7368		J. H. Conner & Co., New Albany.	.205	None.	None.
7378		Henry J. Huder, Indianapolis.	.068	None.	None.
7398		Henshaw & Hughes, Elwood.	.062	None.	Present.
7400		Crown Cordial Extract Co., New York.	.200	None.	Present.
7450		A. J. Redding, Anderson.	.0588	None.	Present.
7517	Eddy's.	Eddy & Eddy, St. Louis.	.032	None.	None.
7522		C. R. Mills, Lawrenceburg.	.068	None.	None.
7536		Galleher & Prutman, Muncie.	.2076	None.	None.
7551	Strong's.	Terra Haute Coffee & Spice Mills.	.035	None.	None.
7554	Rose Bud.	McDowell, Britton & Church, Frankfort.	.120	None.	None.
7556	Double Concentrated.	Jennings Flavoring Ext. Co., Grand Rapids.	.045	None.	Present.
7572		C. E. Abel, Seymour.	.037	None.	None.
7746		J. F. Bruning & Son, Evansville.	.12	None.	None.
7915*		J. H. Danley, Lafayette.	.200	Present.	None.
7958	Conkle's.	Grocers' Supply Co., Indianapolis.	.075	None.	None.
7960		J. D. Bartlett, Lafayette.	.050	None.	None.
7965		S. F. Baker & Co., Keokuk, Iowa.	.2158	None.	None.
7969	Rose Bud.	Norris & Sieger, Frankfort.	.160	None.	None.
7973	Standard.	Gillett Chemical Works, Chicago.	.100	None.	None.

*Labeled "Compound."

VANILLA EXTRACT—LEGAL—Continued.

Lab. No.	Brand.	Manufacturer or Retailer.	Vanillin.	Coumarin.	Caramel.
7975	Monarch.....	Reid, Murdock & Co., Chicago.....	.062	None.....	None.....
7980		Fred Combs, Lebanon.....	.050	None.....	None.....
8010	Judson.....	Siess Bros., Arcadia.....	.025	None.....	None.....
8011	Seely's.....	Siess Bros., Arcadia.....	.124	None.....	None.....
8061		William Fritsch, Evansville.....	.150	None.....	None.....
8136	Whitcap.....	Heekin Spice Co., Cincinnati.....			
8206		L. W. Holmes & Co., Indianapolis.....	.070	None.....	None.....
8220		C. A. Gable, Indianapolis.....	.070	None.....	None.....
8251		Star Drug Store, Lebanon.....	.050	None.....	None.....
8301		Thompson & Taylor Co., Chicago.....	.22	None.....	None.....
8309		Thompson & Taylor Co., Chicago.....	.150	None.....	None.....
8329		Eli Myers, Crawfordsville.....	.170	None.....	None.....
8387		E. W. Fillett Co., Chicago.....	.125	None.....	None.....
8460		Moses Barnett, Evansville.....	.062	None.....	None.....
8577		R. W. Snyder, Battle Creek, Mich.....	.184	None.....	None.....
8645	XXXX.....	McCullough Drug Co., Lawrenceburg.....	.143	None.....	None.....
8750		J. F. Coulson, Logansport.....	.117	None.....	None.....
8936	Pure.....	Atlantic Importing Co., New York.....	.162	None.....	None.....
9175	Souder's.....	Royal Extract & Remedy Co., Dayton.....	.238	None.....	None.....
9174	Trojan.....	John H. Tolman & Co., Chicago.....	.086	None.....	Present
9176	Souder's.....	Royal Remedy & Extract Co., Dayton.....	.227	None.....	None.....
9177	Souder's.....	Royal Remedy & Extract Co., Dayton.....	.149	None.....	None.....
9204		Amos Gipe, Wabash.....	.080	None.....	None.....
9205		Amos Gipe, Wabash.....	.300	None.....	None.....
9206		Amos Gipe, Wabash.....	.112	None.....	None.....
9338		Gem Extract Co., Frankfort.....	.120	None.....	None.....
9339		Gem Extract Co., Frankfort.....	.200	None.....	None.....
7961*		J. D. Bartlett, Lafayette.....	.250	Present	Present.

*Labeled "Compound."

EXTRACT OF VANILLA—ILLEGAL.

Lab. No.	Manufacturer or Dealer.	Vanillin.	Coumarin.	Caramel.	Remarks.
7226	McCoy Drug Co., French Lick.....	.27	.04%.....	Present..	Adulterated.
8256	 Indianapolis.....		None.....	None.....	Below standard.
7612	Brown Extract Co., Indianapolis.....	.4996	None.....	Present..	Largely vanillin.
7184	A. G. Keheler, Danville.....	.025			Below standard.
8094	J. C. Stark, Evansville.....	.240	None.....	None.....	Artificial color.

MISCELLANEOUS EXTRACTS.

The character of miscellaneous extracts is improving just as is the case with the standard extracts. These products have been heretofore classed as illegal because of misbranding. At the present time the trade is conforming to the law and branding the synthetic products artificial fruit flavors instead of pure fruit extracts.

MISCELLANEOUS EXTRACTS—LEGAL.

Lab. No.	Article.	Manufacturer.	Oil.	Color.
7366	Extract Orange.....	J. H. Conner & Co., New Albany.....	6.03	Natural.
7552	Extract Orange.....	Terre Haute Coffee & Spice Mills.....	6.0	Not natural.
7949	Extract Raspberry.....	Lafayette Chemical Works, Lafayette.....		Properly labeled.
9932	Extract Orange.....	E. C. Harley Co., Dayton, O.....	5.85	
8093	Extract Banana.....	Gro. Chemical Works, Evansville.....		
8643	Orange Flavor.....	McCullough Drug Co., Lawrenceburg.....		
8644	Strawberry Flavor.....	McCullough Drug Co., Lawrenceburg.....		

MISCELLANEOUS EXTRACTS—ILLEGAL.

Lab. No.	Article.	Brand.	Manufacturer.	Remarks.
7564	Strawberry Fruit Flavor.	Zipp's Strawberry Fruit Flavor	Zipp Mfg. Co., Cleveland	Benzol acid. Adulterated; not an extract.
7934	Raspberry Extract.		C. F. Hurley, Lafayette.	
8267	Extract Orange.		Anderson R. Garrett, Mechanicsburg.	Not an extract.

MEAT PRODUCTS.

SAUSAGES, PRESSED MEATS, HAMBURGER STEAK, ETC.

Great improvement is noticed in the character of the prepared meats sold throughout the State. The use of preservatives has largely been abandoned. Of the 246 samples of all meat products analyzed, 222 have been pure and 24 adulterated by the use of either borax or the sulphites.

SAUSAGE—LEGAL.

Lab. No.	Retailer.	Lab. No.	Retailer.
7390	Weichner & Arand, Elwood.	8171	Louis Vollroth, Indianapolis.
7396	Bicknell & Mahan, Elwood.	8172	H. Arnold, Indianapolis.
7502	H. C. Adams, Muncie.	8176	I. Gibson, Indianapolis.
7403	Ed. D. Donner, Restaurant, Indianapolis.	8212	Glick & Shane, Indianapolis.
7404	Frank S. Born, Indianapolis.	8213	J. P. Scisecoe, Indianapolis.
7405	Otto Boettcher, Indianapolis.	8215	C. Baumbach, Indianapolis.
7409	Edw. P. Reynolds, Indianapolis.	8216	R. S. Muller, Indianapolis.
7410	Fred Yorger, Indianapolis.	8224	Chas. R. Steidle, Indianapolis.
7411	James Whiteley, Indianapolis.	8241	Chas. A. Underwood, Kirklín.
7412	Horace Brandenburg, Indianapolis.	8327	Frank Fink, Crawfordsville.
7414	Chester E. Wright, Indianapolis.	8332	Phillip Fink & Son, Crawfordsville.
7419	Chas. Rights Market House, Indianapolis.	8339	J. W. Hoard, Indianapolis.
7421	Geo. C. Woessner, Indianapolis.	8340	J. W. Howard, Indianapolis.
7425	Henry Coleman, Indianapolis.	8348	Mammond & Pasquier, Indianapolis.
7426	Herman Vollrath, Indianapolis.	8349	Hammond & Pasquier, Indianapolis.
7427	Wm. S. Baim, Indianapolis.	8350	Hammond & Pasquier, Indianapolis.
7531	Theo. Thomas, Muncie.	8352	J. M. Schilling, Indianapolis.
7533	G. W. Palmer, Muncie.	8353	Jno. R. Schilling, Indianapolis.
7535	O. M. Palmer, Muncie.	8357	Levy Bros., Marion.
7590	Andrew Maas, Indianapolis.	8360	Geo. Otto, Marion.
7591	Schneider Sisters, Indianapolis.	8362	Chester Macon, Marion.
7602	Levey Bros., Marion.	8394	C. B. O'Donnell, Vincennes.
7624	F. E. Luedcke, Indianapolis.	8406	A. Zwickel, Anderson.
7627	C. Zobbe, Indianapolis.	8490	J. H. Toley & Co., Logansport.
7650	Heckel & Hampel, Jeffersonville.	8494	Robt. McCains, Logansport.
7671	G. A. Dobbins, Hammond.	8532	Frank Fall Bros., Elwood.
7683	H. G. Vlier, Hammond.	8612	Alfred L. Gehrett, Veedersburg.
7800	S. M. Hausman, Evansville.	9614	J. R. Dunkle & Son, Veedersburg.
7863	G. L. Eider, Indiana Harbor.	8678	Wayne Delicatessen Co., Ft. Wayne.
7906	Wm. Bofford, Bloomington.	8679	J. Robb, Ft. Wayne.
7908	B. S. Rogers, Bloomington.	8680	Wayne Delicatessen Co., Ft. Wayne.
7985	Alva F. Shirley, Lebanon.	8682	G. R. Walter Co., Ft. Wayne.
8024	D. Kurts, Alexandria.	8683	G. R. Walter Co., Ft. Wayne.
8025	D. Kurts, Alexandria.	8684	Wm. C. Meyer, Ft. Wayne.
8085	A. H. Elsterhold, Evansville.	8685	Wm. C. Meyer, Ft. Wayne.
8087	Jacob Fols, Jr., Evansville.	8686	Wm. C. Meyer, Ft. Wayne.
8132	J. M. Kenady, Irvington.	8688	Cut Rate Market, Ft. Wayne.
7962	Armentrout Bros., Frankfort.	8689	Cut Rate Market, Ft. Wayne.
8100	Lon Essig, Indianapolis.	8757	Fred Helman, Terre Haute.
8144	Bills & Boettcher, Indianapolis.	8875	H. M. Fisher, Franklin.
8152	Irrgang Bros., Indianapolis.	8876	J. D. Boles, Franklin.
8153	Irrgang Bros., Indianapolis.	9143	Munz & Nellens, Peru.
8154	Stimmendingers, Indianapolis.	9280	Homer Watson, Marion.

SAUSAGE—LEGAL—Continued.

Lab. No.	Retailer.	Lab. No.	Retailer.
9283	Barney Bros., Marion.	10262	Denkin & Mathis, Van Buren.
9286	M. L. Swayzee, Marion.	10263	J. E. Matchett, Swayzee.
9287	M. L. Swayzee, Marion.	10279	Heffner & Dobeson, Summitville.
9289	Charles Levy Sons Market, Marion.	10280	V. R. Love, Summitville.
9291	C. C. Gordon, Marion.	10281	Marshall & Schaffer, Summitville.
9396	Chris. G. Reined, Shelbyville.	10288	Julius Newman, Evansville.
9397	Fred L. Bogeman, Shelbyville.	10294	John Vols, Evansville.
9609	C. P. Sindlinger, Shelbyville.	10361	Hoffer Bros., Muncie.
9769	Rohrer, South Bend.	10362	Kuhner & Co., Muncie.
9791	E. H. Quillen, South Bend.	10363	I. Benzenbower, Muncie.
9893	Jno. Fisher, Greenfield.	10364	Topp & Moore, Muncie.
9902	Painter & Farling, Bluffton.	10365	Ed. Goebel & Co., Muncie.
9903	Painter & Farling, Bluffton.	10366	George W. Palmer, Muncie.
9987	C. Oscar Tribbey, Plymouth.	10386	Evansville Packing Co., Evansville.
9989	W. R. Crowder, Plymouth.	10387	Gus Weil, Evansville.
10036	H. A. Compton, New Castle.	10415	Court House Grocery, Indianapolis.
10038	J. Meyers, Cambridge City.	10418	O. J. Sloan, Indianapolis.
10067	W. J. Shaffner, Michigan City.	10442	Henry Daniels, Red Key.
10077	O. E. Keesling, Michigan City.	10443	Charles Giesler, Red Key.
10080	R. A. Ebert, Michigan City.	10494	Charles Ritter, Hartford City.
10134	C. W. Covey, Princeton.	10435	Frank Wilson, Hartford City.
10141	M. Tibbet, Princeton.	10436	Mike Sauer, Hartford City.
10163	George Hadley, Anderson.	10437	George Rapp, Hartford City.
10164	Striker Bros. Anderson.	10438	Jno. Keller, Montpelier.
10167	W. J. Whyte, Anderson.	10439	F. Hedger, Montpelier.
10174	G. W. Hadley, Anderson.	10440	H. Ganister, Albany.
10175	Goff Bros. Anderson.	10447	R. M. Brotherton, Dunkirk.
10178	Jue Phillips, Anderson.	10450	Davis & Spink, Dunkirk.
10179	J. Phillips, Anderson.	10451	Ora Sanders, Middletown.
10180	Masters & Shackelford, Anderson.	10452	B. E. Goff & Son, Middletown.
10246	C. L. Coppock, Jonesboro.		

SAUSAGE—ILLEGAL

Lab. No.	Retailer.	Borax.	Per cent. Sodium Sulphate.
8316	Jacob Woessner, Indianapolis.	Absent...	Present.
8026	John P. Downs, Alexandria.	Absent...	.1032
7796	Gus Weil, Evansville.	Absent...	.0179
8531	B. H. Keller, Elwood.		Present.
8681	Decatur Packing Co., Decatur.		.04334
9687	Decatur Packing Co., Decatur.		.04334
10240	Wm. Dockter, Gas City.		.03628
8451	Carl Stutz, Mt. Vernon.	Present...	
7507	Ed. Goebel & Co., Muncie.		.04032
8358	Chris C. Gordon, Marion.	Absent...	.0236
8786	George Sheidel, Terre Haute.		Present.
8525	Batchelor & May, Tipton.		Present.
8521	Bunch & Bunch, Tipton.		Present.
8522	Moore & Surface, Tipton.		Present.
7652	Heckel & Humpel, Jeffersonville.		.0694

BACON—LEGAL.

Lab. No.	Retailer.	Lab. No.	Retailer.
9805	John Wesolowski, South Bend.	10316	C. A. Kilmer, Rochester.
9806	T. Faberski, South Bend.		

BOLOGNA—LEGAL.

Lab. No.	Dealer.	Lab. No.	Dealer.
8359	M. L. Swazee, Marion.	7861	Welhey & Banett, Indiana Harbor.
8491	J. H. Toley & Co., Logansport.	7886	Hugh Bowen, Lebanon.
8285	Leslie Good, Mechanicsburg.	9146	S. W. Smith, Peru.
8990	John J. Halberg, Terre Haute.	9807	T. Taberski, South Bend.
7575	Louis Heins, Seymour.	9834	Walt Montgomery, Delphi.
7576	Louis Heins, Seymour.	10000	W. R. Crowder, Plymouth.

BOLOGNA—ILLEGAL.

Lab. No.	Dealer.	Remarks.
8526	Batchelor & May, Tipton.....	Adulterated—Sodium Sulfite.

WIENERWURST—LEGAL.

Lab. No.	Dealer.	Lab. No.	Dealer.
8208	Thos. C. Scott, Indianapolis.	10327	Charles Odnalt, Vincennes.
8240	Oliver M. Neal, Kirklin.	7654	Anton Stolle, Richmond.
8793	Ehrman & Co., Terre Haute.	7656	Richmond Abattoir, Richmond.
9006	J. W. Hoff, Terre Haute.	7681	F. Kunzmann, Hammond.
9868	C. Oscar Tribbey, Plymouth.	7978	Andrew Overless, Frankfort.
10326	Horace G. Hays, Vincennes.	8025	J. H. O'Bryant, Alexandria.

WIENERWURST—ILLEGAL.

Lab. No.	Dealer.	Remarks.
7652	Charles Hampel, Jeffersonville.....	Adulterated—Sodium Sulfite.

HAMBURGER STEAK—LEGAL.

Lab. No.	Retailer.	Lab. No.	Retailer.
7406	Otto Boettcher, Indianapolis.	8393	John B. Zuber, Vincennes.
7415	Chester E. Wright, Indianapolis.	8395	H. G. Haynes, Vincennes.
7420	All T. Baumb, Indianapolis.	8538	Fred C. Allendorf, Elwood.
7424	Henry Coleman, Indianapolis.	9061	H. Stumpp & Son, Washington.
7593	Fred Jans, Indianapolis.	9061	H. Stumpp & Son, Washington.
7555	Steenbergen, Indiana Harbor.	8771	Rohrer, South Bend.
7905	Wm. Bofford, Bloomington.	10039	J. Meyers, Cambridge City.
7907	Ben. S. Rogers, Bloomington.	10362	Hoffer Bro., Muncie.
7977	Andrew Overless, Frankfort.	10385	Charles Bromm, Evansville.
8083	Aug. Wessel, Evansville.	10391	Yokel & Son, Evansville.
8145	Bills & Boettcher, Indianapolis.	10441	H. Ganister, Albany.
8230	R. C. McIntire, Lebanon.	10440	J. W. Webster, Dunkirk.

SAUSAGE—LEGAL—Continued.

Lab. No.	Retailer.	Lab. No.	Retailer.
9283	Barney Bros., Marion.	10262	Denkin & Mathis, Van Buren.
9286	M. L. Swayzee, Marion.	10263	J. E. Matchett, Swayzee.
9287	M. L. Swayzee, Marion.	10279	Heffner & Dobeson, Summitville.
9289	Charles Levy Sons Market, Marion.	10280	V. R. Love, Summitville.
9291	C. C. Gordon, Marion.	10281	Marshall & Schaffer, Summitville.
9596	Chris. G. Reined, Shelbyville.	10288	Julius Newman, Evansville.
9597	Fred L. Bogeman, Shelbyville.	10294	John Volz, Evansville.
9609	C. P. Sindlinger, Shelbyville.	10361	Hoffer Bros., Muncie.
9789	Rohrer, South Bend.	10362	Kuhner & Co., Muncie.
9791	E. H. Quillen, South Bend.	10363	I. Benzenbower, Muncie.
9893	Jno. Fisher, Greenfield.	10364	Topp & Moore, Muncie.
9902	Painter & Farling, Bluffton.	10365	Ed. Goebel & Co., Muncie.
9903	Painter & Farling, Bluffton.	10366	George W. Palmer, Muncie.
9987	C. Oscar Tribbey, Plymouth.	10386	Evansville Packing Co., Evansville.
9999	W. R. Crowder, Plymouth.	10387	Gus Weil, Evansville.
10036	H. A. Compton, New Castle.	10415	Court House Grocery, Indianapolis.
10038	J. Meyers, Cambridge City.	10418	O. J. Sloan, Indianapolis.
10067	W. J. Shaffering, Michigan City.	10442	Henry Daniels, Red Key.
10077	O. E. Keadling, Michigan City.	10443	Charles Geisler, Red Key.
10080	R. A. Ebert, Michigan City.	10434	Charles Ritter, Hartford City.
10134	C. W. Covey, Princeton.	10435	Frank Wilson, Hartford City.
10141	M. Tibbet, Princeton.	10436	Mike Sauer, Hartford City.
10163	George Hadley, Anderson.	10437	George Rapp, Hartford City.
10164	Striker Bros Anderson.	10438	Jno. Keller, Montpelier.
10167	W. J. Whyte, Anderson.	10439	F. Hedges, Montpelier.
10174	G. W. Hadley, Anderson.	10440	H. Ganister, Albany.
10175	Goff Bros., Anderson.	10447	R. M. Brotherton, Dunkirk.
10178	Jue Phillips, Anderson.	10450	Davis & Spink, Dunkirk.
10179	J. Phillips, Anderson.	10451	Ora Sanders, Middletown.
10180	Masters & Shackelford, Anderson.	10452	B. E. Goff & Son, Middletown.
10246	C. L. Coppock, Jonesboro.		

SAUSAGE—ILLEGAL.

Lab. No.	Retailer.	Borax.	Per cent. Sodium Sulfit.
8316	Jacob Woessner, Indianapolis	Absent...	Present.
8026	John P. Downs, Alexandria	Absent...	.1032
7786	Gus Weil, Evansville	Absent...	.0179
8531	B. H. Keller, Elwood		Present.
8681	Decatur Packing Co., Decatur		.04334
8687	Decatur Packing Co., Decatur		.04334
10240	Wm. Dockter, Gas City		.03628
8451	Carl Statz, Mt. Vernon	Present...	
7507	Ed. Goebel & Co., Muncie		.04032
8358	Chris C. Gordon, Marion	Absent...	.0236
8786	George Sheidel, Terre Haute		Present.
8525	Batchelor & May, Tipton		Present.
8521	Bunch & Bunch, Tipton		Present.
8522	Moore & Surface, Tipton		Present.
7652	Heckel & Hanpel, Jeffersonville		.0694

BACON—LEGAL.

Lab. No.	Retailer.	Lab. No.	Retailer.
9805	John Wesolowski, South Bend.	10316	C. A. Kilmer, Rochester.
9808	T. Taberski, South Bend.		

BOLOGNA—LEGAL.

Lab. No.	Dealer.	Lab. No.	Dealer.
8359	M. L. Swazsee, Marion.	7861	Welch & Banett, Indiana Harbor.
8491	J. H. Toley & Co., Logansport.	7986	Hugh Bowen, Lebanon.
8285	Leslie Good, Mechanicsburg.	9146	S. W. Smith, Peru.
8990	John J. Halberg, Terre Haute.	9807	T. Taberski, South Bend
7575	Louis Heins, Seymour.	9834	Walt Montgomery, Delphi.
7576	Louis Heins, Seymour.	10000	W. R. Crowder, Plymouth.

BOLOGNA—ILLEGAL.

Lab. No.	Dealer.	Remarks.
8526	Batchelor & May, Tipton.	Adulterated—Sodium Sulfit.

WIENERWURST—LEGAL.

Lab. No.	Dealer.	Lab. No.	Dealer.
8208	Thos. C. Scott, Indianapolis.	10327	Charles Odalt, Vincennes.
8240	Oliver M. Neal, Kirklín.	7654	Anton Stolle, Richmond.
8793	Ebrman & Co, Terre Haute.	7656	Richmond Abattoir, Richmond.
9006	J. W. Hoff, Terre Haute.	7681	F. Kunzmann, Hammond.
9986	C. Oscar Tribbey, Plymouth.	7978	Andrew Overless, Frankfort.
10326	Horace G. Hays, Vincennes.	8025	J. H. O'Bryant, Alexandria.

WIENERWURST—ILLEGAL.

Lab. No.	Dealer.	Remarks.
7652	Charles Hampel, Jeffersonville.	Adulterated—Sodium Sulfit.

HAMBURGER STEAK—LEGAL.

Lab. No.	Retailer.	Lab. No.	Retailer.
7406	Otto Boettcher, Indianapolis.	8393	John B. Zuber, Vincennes.
7415	Chester E. Wright, Indianapolis.	8395	H. G. Haynes, Vincennes.
7120	All. T. Baumb, Indianapolis.	8538	Fred C. Allendorf, Elwood.
7424	Henry Coleman, Indianapolis.	9061	H. Stumpp & Son, Washington.
7593	Fred Jans, Indianapolis.	9061	H. Stumpp & Son, Washington.
7855	Steenbergen Indiana Harbor.	9771	Rohrer, South Bend
7905	Wm. Bofford, Bloomington.	10039	J. Meyers, Cambridge City.
7907	Ben. S. Rogers, Bloomington.	10382	Hoffer Bro., Muncie.
7977	Andrew Overless, Frankfort.	10385	Charles Brown, Evansville.
8083	Aug. Wessel, Evansville.	10391	Yokel & Son, Evansville.
8145	Bills & Boettcher, Indianapolis.	10441	H. Ganister, Albany.
8239	R. C. McIntire, Lebanon.	10449	J. W. Webster, Dunkirk.

HAMBURGER STEAK—ILLEGAL.

Lab. No.	Retailer.	Remarks.
7565	Louis Heins, Seymour	Sodium sulfite present.
8175	Fred Alderdorf, Elwood	Sodium sulfite present.
8086	Jacob Fols, Jr., Evansville	Sodium sulfite present.
8084	Ed. Waldsmith, Evansville	Sodium sulfite present.
7800	A. J. Street, Marion	Sodium sulfite present.
7509	Ed. Goebel, Muncie	Sodium sulfite present.

HAM—LEGAL.

Lab. No.	Dealer.	Lab. No.	Dealer.
8318	Robert Graham, Indianapolis.	9142	Muns & Nellen, Peru.
8223	Charles R. Steine, Indianapolis.	8770	Rohrer, South Bend.
8484	John Rahung, Logansport.	8792	E. H. Quillen, South Bend.
8485	A. Hawkins & Son, Logansport.	10166	W. J. Whyte, Anderson.
8493	Elpers & Miller, Logansport.	10177	Zwickel, Anderson.
8736	D. W. Powden, Logansport.	10229	Kepler, Rochester.
7849	John Lesniak, East Chicago.		

MISCELLANEOUS MEATS—LEGAL.

Lab. No.	Article.	Manufacturer or Dealer.
7972	Beef Loaf	Libby, McNeil & Co., Chicago.
7394	Chicken Potpie	Great Western Canning Co., Delphi.
7966	Potted Tongue	Columbia Conserve Co., Indianapolis.
8275	Minced Ham	Marlet C. Rohler, Dayton.
7586	Liver Pudding	Thos. A. Hendrickson, Indianapolis.
7685	Cornbeef	Chas. Berendt, Hammond.
7700	Veal Loaf	Max Noach, Hammond.
7858	Bacon	J. J. Koch, Indiana Harbor.
8311	Sausage Filler	Heller & Co., Chicago.
10068	Cornbeef	W. J. Shaffering, Michigan City.
10308	Head Cheese	Charles Taylor, Rochester.

MISCELLANEOUS MEATS—ILLEGAL.

Lab. No.	Article.	Manufacturer or Dealer.	Remarks.
8130	Minced meat	Cruikshanks & Co., Allegheny, Pa.	Benzoate of soda present.

LARD AND LARD COMPOUNDS.

The practice, long indulged in by butchers without restraint, of selling a mixture of lard and beef fats as lard, still continues. Of the 179 samples recently analyzed, 89 contained admixtures either of beef fats or cottonseed oil. There are two reasons for this practice; one, the difficulty of producing a pure lard that will not become soft during warm weather, and the other, the fact that the

small butcher can be rendering the scraps from his meat block, sell the extracted fat at a much higher price under the name of "lard" than if it goes to the soap manufacturer. The large manufacturing trade has followed the practice of adding oleo stearine to lard in order to make it firm, and have not until recently declared the fact of its presence. While it may be true that the oleo stearine costs as much as the lard, and in some cases is worth even more, the practice is a deception. At the present time the manufacturing industry is substituting special processes of chilling the lard for the beef oleo, and is producing a superior article that is in accordance with the standards.

LARD—LEGAL.

Lab. No.	Manufacturer or Dealer.	Butyro Reading at 49° C.	Halphen Test.	Beef Fat.
7195	, Seymour.	51.0	Negative.	Absent.
7588	Kingan & Co., Indianapolis.	50.8	Negative.	
7342	McKee & Rule, Kokomo.	50.25	Negative.	
7346	Walter Ervington, Kokomo.	50.50	Negative.	
7347	McCaferly Bros., Kokomo.	49.40	Negative.	
7390	Indianapolis Abattoir, Indianapolis.	50.30	Negative.	
7381	, Indianapolis.	48.50	Negative.	
7394	Chas. Wilson, Elwood.	50.1	Negative.	
7395	Bicknell & Mahon, Elwood.	49.7	Negative.	
7407	Edw. P. Reynolds, Indianapolis.	50.4	Negative.	
7413	John P. Simmendinger's, Indianapolis.	50.3	Negative.	
7585	Coffin & Fletcher Co., Indianapolis.	50.2	Negative.	
7596*	Albert Worm, Indianapolis.	52.5	Cottonseed oil 15%.	Present.
7622	Mrs. F. D. Smith, Indianapolis.	50.4	Negative.	Absent.
7623	H. H. Meyer, Indianapolis.	50.3	Negative.	Absent.
8049	Hilgemier, Indianapolis.	51.6	Negative.	Absent.
8177	Fred Alderdorf, Elwood.	49.5	Negative.	Absent.
8199	Koehler Bros., Indianapolis.	49.0	Negative.	Absent.
8276	M. C. Rohler, Dayton.	49.4	Negative.	Absent.
8317	Jacob Woessner, Indianapolis.	50.8	Negative.	Absent.
8396	White & Howard, Muncie.	50.4	Negative.	Absent.
8405	A. Zwickel, Anderson.	49.6	Negative.	Absent.
8442	Samuel G. Newman, Evansville.	48.6	Negative.	Absent.
8487	Schneider & Co., Logansport.	49.65	Negative.	Absent.
8541	Borst Bros., Attica.	49.7	Negative.	Absent.
8546	T. A. Brant, Attica.	49.3	Negative.	Absent.
8590	J. T. Ives & Sons Co., Delphi.	50.6	Negative.	Absent.
8682	Michael Clifford, Delphi.	49.5	Negative.	Absent.
8613	Fountain Mdse. Co., Veedersburg.	49.6	Negative.	Absent.
8615	J. B. Dunkle & Son, Veedersburg.	49.7	Negative.	Absent.
8618	Alfonso Irvin, Veedersburg.	49.4	Negative.	Absent.
8620	Le Baw & Phillips, Veedersburg.	48.6	Negative.	Absent.
8621	Albert W. Harper, Williamsport.	49.6	Negative.	Absent.
8625	Fox Bros., Williamsport.	50.3	Negative.	Absent.
8291	Cook & Hensler, Shoals.	50.0	Negative.	Absent.
8807	Fred Kramer, Columbus.	50.7	Negative.	Absent.
8809	E. Wolfe, Columbus.	50.6	Negative.	Absent.
8291	Cook & Hensler, Shoals.	50.0	Negative.	Absent.
8807	Fred Kramer, Columbus.	50.7	Negative.	Absent.
8809	E. Wolfe, Columbus.	50.6	Negative.	Absent.
8814	Jos. Morrison & Son, Columbus.	49.6	Negative.	Absent.
8874	H. M. Fisher, Franklin.	50.0	Negative.	Absent.
8877	J. D. Boles, Franklin.	50.0	Negative.	Absent.
8976	Edward R. Pierce, Terre Haute.	49.65	Negative.	Absent.
9051	George Gilliot, Washington.	49.5	Negative.	Absent.
9052	H. F. Vollman, Washington.	49.35	Negative.	Absent.
9059	Cabel & Kaufman, Washington.	49.5	Negative.	Absent.
9136	Kelly & Allman, Peru.	50.3	Negative.	Absent.
9141	Muns & Nellens, Peru.	50.0	Negative.	Absent.

*As represented.

LARD—LEGAL—Continued.

Lab. No.	Manufacturer or Dealer.	Butyro Reading at 40° C.	Halphen Test.	Beef Fat.
9144	S. W. Smith, Peru	49.2	Negative	Absent.
9151	E. A. Schram, Peru	50.45	Negative	Absent.
9274	Wm. Hillsamer, Marion	49.2	Negative	Absent.
9276	J. H. Anderson, Marion	49.6	Negative	Absent.
9277	W. A. Reese, Marion	48.65	Negative	Absent.
9278	Homer Watson, Marion	50.0	Negative	Absent.
9281	Creston Bros., Marion	49.85	Negative	Absent.
9284	Barney Bros., Marion	49.9	Negative	Absent.
9285	M. L. Swayze, Marion	49.8	Negative	Absent.
9288	Charles Levy, Marion	49.5	Negative	Absent.
9290	C. C. Gordon, Marion	47.6	Negative	Absent.
9296	Mack Brown, Linton	49.6	Negative	Absent.
9299	Herbert Hincman, Switz City	49.55	Negative	Absent.
9308	Samuel P. Mills, Jasonville	49.7	Negative	Absent.
9310	Linders Bros., Jasonville	49.3	Negative	Absent.
9394	Wm. Nance, New Albany	50.1	Negative	Absent.
9401	Korb Brothers, New Albany	49.8	Negative	Absent.
9404	J. H. Brown, New Albany	49.5	Negative	Absent.
9512	Krusan Bros., Brazil	50.2	Negative	Absent.
9813	Jones & Co., Brazil	49.75	Negative	Absent.
9816	A. W. Shaffer, Brazil	49.8	Negative	Absent.
9982	The Trader Palace Grocery, Plymouth	49.6	Negative	Absent.
9988	C. Oscar Tribbey, Plymouth	49.7	Negative	Absent.
9998	W. R. Crowder, Plymouth	48.7	Negative	Absent.
10064	S. Hunziker, Michigan City	50.2	Negative	Absent.
10066	W. J. Shafering, Michigan City	49.4	Negative	Absent.
10074	O. A. Wellnitz, Michigan City	50.1	Negative	Absent.
10076	O. F. Keadins, Michigan City	50.3	Negative	Absent.
10128	Smith & Riggs, Princeton	49.5	Negative	Absent.
10135	C. W. Covey, Princeton	50.0	Negative	Absent.
10137	Louis Salzman, Princeton	49.5	Negative	Absent.
10140	M. Tibbet, Princeton	50.7	Negative	Absent.
10289	Vickery Bros., Evansville	50.2	Negative	Absent.
10293	Jno. Harrigan, Evansville	50.3	Negative	Absent.
10295	John Fols, Evansville	49.6	Negative	Absent.
10301	L. E. Downie, Rochester	49.6	Negative	Absent.
10311	F. Marsh, Rochester	49.1	Negative	Absent.
10315	C. A. Kilmer, Rochester	50.4	Negative	Absent.
10323	R. S. Lowery, Rochester	49.8	Negative	Absent.
10390	George Egan, Evansville	50.1	Negative	Absent.
10392	Charles Arnold, Evansville	50.15	Negative	Absent.

LARD—ILLEGAL.

Lab. No.	Dealer.	Butyro Reading at 40° C.	Halphen Test for Cotton Seed Oil.	Beef Fat.
7769	Louis Cornet, Indianapolis	50.7	20%	Present.
7850	W. J. Webb, Kokomo	50.8	15%	
7377	New York Store, Indianapolis	50.1	10%	
7625	Indianapolis	50.2	Negative	Present.
7795	Vickery Bros., Evansville	56.0	40%	Present.
9050	Indianapolis	49.0	Negative	Present.
7595	F. P. Jagers, Indianapolis	50.0	Negative	Present.
7580	Andrew Mass, Indianapolis	52.9	30%	
7422	Chas. H. Cook, Indianapolis	53.2	30%	
7423	Jno. Brenner, Indianapolis	50.4	15%	Present.
7592	Schneider Sisters, Indianapolis	50.4	10%	Present.
7669	Standard Grocery Co., Indianapolis	50.5	Negative	Present.
7594	Fred Jaus, Indianapolis	49.3	Negative	Present.
7626	C. Zobbe, Indianapolis	49.8	Negative	Present.
7587	Chas. Morback, Indianapolis*	49.6	Negative	Present.
7508	Ed. Goebel, Muncie	49.0	3%	Present.
7532	G. W. Palmer, Muncie	49.5	3%	Present.
7503	H. C. Adams, Muncie	51.8	15%	Present.
7534	O. M. Stewart, Muncie			

*Guaranteed to Morback to be pure by Wm. Roth Co., Cincinnati, Manufacturers.

LARD—ILLEGAL—Continued.

Lab. No.	Dealer.	Butyro Reading at 40° C.	Haiphphen Test for Cotton Seed Oil.	Beef Fat.
7530	Kuhner & Co., Muncie.....	51.8	15%.....	Present.
8022	Daniel Kurtz, Alexandria.....	51.3	Negative.....	Present.
7389	Weichner & Arend, Elwood.....	51.2	15%.....	
7801	Louis Schmadel, Evansville.....	50.8	Negative.....	Present.
7762	Samuel G. Newman, Evansville.....	45.5	Negative.....	Present.
7796	Vickery Bros., Evansville.....	51.3	Negative.....	Present.
7603	Levey Bros., Marion.....	50.1	Negative.....	Present.
7601	A. J. Street, Marion.....	52.4	25%.....	Present.
7850	John Lesniak, East Chicago.....	56.1	40%.....	Present.
7853	W. R. Diamond, East Chicago.....	51.1	Negative.....	Present.
7854	Steenbergen, Indiana Harbor.....	50.0	Negative.....	Present.
7857	J. J. Koch, Indiana Harbor.....	51.3	Negative.....	Present.
7860	Welbey & Banett, Indiana Harbor.....	50.9	Negative.....	Present.
7862	G. L. Eisler, Indiana Harbor.....	51.7	Negative.....	Present.
7674	W. G. Beiriger, Hammond.....	50.1	Negative.....	Present.
7699	Max Noach, Hammond.....	50.4	Negative.....	Present.
7670	G. A. Dobbins, Hammond.....	49.5	Negative.....	Present.
7677	J. J. Austgen, Hammond.....	50.0	Negative.....	Present.
7679	F. Kunzmann, Hammond.....	49.7	15%.....	Present.
7682	H. G. Vlier, Hammond.....	52.4	25%.....	Present.
7684	Chas. Berendt, Hammond.....	53.0	30%.....	Present.
8549	Geo. Fenerstein, Attica.....	49.5	Negative.....	Present.
8606	Ost & Davis, Covington.....	50.0	Negative.....	Present.
8605	Wm. Dennis, Covington.....	49.75	Negative.....	Present.
8743	F. W. Klein, Logansport.....	50.4	5%.....	Present.
8492	Elpers & Miller, Logansport.....	48.75	Negative.....	Present.
8737	D. W. Powden, Logansport.....	48.4	Negative.....	Present.
8495	Robt. McCains, Logansport.....	49.4	10%.....	Present.
8483	John Rabung, Logansport.....	49.6	5%.....	Present.
8481	Louis Diechman, Logansport.....	49.7	Negative.....	Present.
8480	J. H. Foley & Co., Logansport.....	49.35	Negative.....	Present.
8768	Chas. A. Raeber, Terre Haute.....	49.65	10%.....	Present.
8773	Ed. A. Hollingsworth, Terre Haute.....	51.3	10%.....	Present.
8758	Fred Helman, Terre Haute.....	47.9	Negative.....	Present.
8759	Chas. H. Ehrman & Co., Terre Haute.....	50.9	25%.....	Present.
8617	W. S. Bannon, Veedsburg.....	49.8	Negative.....	Present.
8134	J. C. Roth, Cincinnati.....	50.0	Negative.....	Present.
8214	E. E. Waddington, Indianapolis.....	48.8	Negative.....	Present.
8222	Chas. R. Steine, Indianapolis.....	48.7	Negative.....	Present.
8400	H. D. Bickel, Marion.....	49.6	Negative.....	Present.
8774	George Wood, Terre Haute.....	51.4	10%.....	Present.
8791	C. O. Boyll, Terre Haute.....	49.5	Negative.....	Present.
8794	John F. Caine, Terre Haute.....	50.2	Negative.....	Present.
8797	C. W. Nagle, Terre Haute.....	49.6	Negative.....	Present.
8289	Jos. C. Herron, Crawfordsville.....	49.4	5%.....	Present.
8543	Daniel V. Smith & Co., Attica.....	49.7	Negative.....	Present.
8544	Fred Springman, Attica.....	50.1	Negative.....	Present.
8547	H. W. Newlin, Attica.....	49.6	Negative.....	Present.
8548	Lauman & Hock, Attica.....	49.7	Negative.....	Present.
8601	Zimmerman & Son, Covington.....	50.0	Negative.....	Present.
8604	Lewis Nebeker, Covington.....	50.0	Negative.....	Present.
8607	Coleman, Reeves & Coleman, Covington.....	50.5	Negative.....	Present.
8610	Merryman Bros., Covington.....	49.9	Negative.....	Present.
8611	George W. Crane, Covington.....	54.9	30%.....	Present.
8623	A. W. Harper, Williamsport.....	48.7	Negative.....	Present.
8626	H. W. Darling, Williamsport.....	48.3	Negative.....	Present.
8755	Dreyfus & Co., Lafayette.....	49.9	Negative.....	Present.
8756	Eckhouse, Lafayette.....	49.8	Negative.....	Present.
8243	W. A. Huffine & Son, Kirklint.....	50.0	Negative.....	Present.
8139	Smith Brothers, Zionsville.....	50.2	Negative.....	Present.
9396	Benj. Jackson, New Albany.....	50.3	Negative.....	Present.
9396	John Stull, New Albany.....	49.65	Negative.....	Present.
9393	Miss Katie Dean, New Albany.....	50.0	Negative.....	Present.
9658	W. C. Blum, Connorsville.....		15%.....	Present.
8282	Sinkey & Gilkey, Crawfordsville.....	48.7	Negative.....	Present.
8333	Phillip Fink & Son, Crawfordsville.....	48.7	Negative.....	Present.
8288	T. E. Weil & Co., Crawfordsville.....	48.8	Negative.....	Present.
8607	Coleman, Reeves & Coleman, Covington.....	50.5	Negative.....	Present.
8548	Lauman & Hock, Attica.....	49.7	Negative.....	Present.
8547	H. W. Newlin, Attica.....	49.6	Negative.....	Present.

LEAVENING PRODUCTS.

Nine samples of baking powder and 41 of cream of tartar were examined. Of these numbers eight of the baking powders were up to standard, and 38 of the cream of tartars were good.

BAKING POWDER—LEGAL.

Lab. No.	Manufacturer or Dealer.	Available Carbon Dioxid, Per Cent.
7353	W. J. Webb, Kokomo.	12.04
7521	Omer Stockman, Lawrenceburg.	12.78
8730	Calumet Baking Powder Co., Chicago.	11.59
7864	G. L. Eisler, Indiana Harbor.	10.04
7911	Miss Elsie Marshall, Richmond.	11.09
9352	J. H. Walker, Rockport.	10.9
9928	E. C. Harley & Co., Dayton, O.	*52.1
9930	E. C. Harley & Co., Dayton, O.	10.5

*Baking soda.

BAKING POWDER—ILLEGAL.

Lab. No.	Manufacturer or Dealer	Available Carbon Dioxid, Per Cent.	Remarks.
8838	Froman Bros., Columbus.	9.06	An old powder.

CREAM TARTAR—LEGAL.

Lab. No.	Dealer.	Per Cent. Purity.
7396	J. J. Keene, Indianapolis.	100.0
7398	Fisher's Pharmacy, Indianapolis.	100.0
7399	Chas. Hock, Indianapolis.	99.0
7392	Wm. H. Baird, Indianapolis.	99.5
7528	J. R. Eganbright, Indianapolis.	99.9
7607	C. H. Overman, Marion.	99.0
7617	Hildebrand & Angley, Marion.	99.0
7633	J. W. Hoover, Jeffersonville.	100.0
7645	Ben Doolittle, Jeffersonville.	100.0
7720	Fred M. Petersheim, Evansville.	98.0
7732	Gottman Drug Co., Evansville.	96.0
7744	J. F. Bomm Drug Co., Evansville.	99.0
7753	L. C. Bomm Drug Co., Evansville.	97.0
7997	Sieas Bros., Arcadia.	97.4
8001	Sieas Bros., Arcadia.	97.6
7873	H. H. Jeffers, Bloomington.	99.0
7877	Jno. W. O'Harrow, Bloomington.	99.0
7894	J. C. Vermillion, Bloomington.	98.0
7896	Wood Wiles, Bloomington.	98.0
7891	Thomas J. Penrod, Bloomington.	99.0
7937	Brown Drug Co., Lafayette.	98.0
7956	E. B. Merritt, Frankfort.	99.0
8258	Meyer Bros., St. Louis.	98.0
8046	Muesh & Co., New York City.	99.0
8057	G. W. Tepe, Evansville.	98.0
8089	Leight & Co., Evansville.	99.0
8091	Leight & Co., Evansville.	99.0
8586	Ralph Hill, Delphi.	97.0
8587	Crawford Bros., Delphi.	97.0
8593	George Gifford, Delphi.	97.0
8857	Will Wetz, Columbus.	97.0
9068	I. J. Rich, Washington.	97.0
.....	L. M. Davis, Marengo.	96.7
9799	Brodbeck Bros., South Pend.	96.0
9911	A. C. Pilkenton, Greenfield.	97.0
9911	N. Reeves, Knightstown.	97.0
9089	Frank Vongelder, Plymouth.	97.0
10057	E. R. Durkee & Co., New York.	97.0

Lab. No.	Dealer.	Per Cent. Purity.	Remarks.
8280	Barnhill, Hornaday & Pickett, Crawfordsville	99.0	Starch and alum present
8840	Cox & McMillan, Columbus	99.5	Starch and alum present.
8269	Lawrence Nicely, Dayton	81.0	Starch and alum present.

PRESERVED FRUITS, JELLIES AND JAMS.

But few samples of these products have been examined. For the most part such goods are now properly labeled. Of the 13 samples analyzed 11 were pure and 2 were bad.

PRESERVED FRUITS, JELLIES AND JAMS—LEGAL.

Lab. No.	Article.	Brand.	Manufacturer or Dealer.	Remarks
7486	Blackberry Glucose Preserves.	Crescent.....	, Indianapolis.....	Passed.
7485	Cherry Glucose Preserves.	Crescent.....	, Indianapolis.....	Passed.
7433	Peach Glucose Preserves	Crescent.....	, Indianapolis.....	Passed.
7784	Plum Glucose Preserves	Crescent.....	, Indianapolis.....	Passed.
7487	Raspberry Glucose Preserves.	Crescent.....	, Indianapolis.....	Passed.
7482	Strawberry Glucose Preserves.	Crescent.....	, Indianapolis.....	Passed.
7391	Sliced Pineapple Preserves	Ko-We Ba.	Kothe, Wells & Bauer, Indianapolis	Pure.
7186	Currant Preserves.	.....	Pearson Bros., Danville.	Pure.
7291	Apple Jelly	.....	Rush Co. Grocery Co., Rushville.	Pure.

PRESERVED FRUITS, JELLIES AND JAMS—ILLEGAL.

Lab. No.	Article.	Brand	Manufacturer or Dealer.	Remarks.
7798	Glucose Plum Preserves..	Buffalo.	Hulman Preserve Co., Evanville	Adulterated with Benzoin of Soda.
7936	Strawberry Jam		P. J. Ritter Conserve Co., Lafayette.....	Adulterated with Benzoin of Soda.

OLIVE OIL.

Fifty-three samples of olive oil were analyzed during the year and but one was found to be adulterated. This indicates an adulteration of less than 2 per cent. as compared with an adulteration of 30 per cent. for 1906. It is evident that it is no longer impossible to buy pure olive oil.

OLIVE OIL—LEGAL.

Lab. No.	Manufacturer or Retailer.	Halphen Test.	Butyro Reading at 20° C.	Specific Gravity.
7164	Harry Mills, Martinsville.....	Negative..	61.50	
7194	 Dana.....	None.....	65.00	
7203	Jno. E. Broom, Indianapolis.....		65.25	
7204	H. J. Huder, Store No. 1, Indianapolis.....		66.46	
7211	Jno. Carroll, Indianapolis.....		66.23	

OLIVE OIL—LEGAL—Continued.

Lab. No.	Manufacturer or Retailer.	Halphen Test.	Butyro Reading at 20° C.	Specific Gravity.
7230	Julius Hoag, Indianapolis.		65.15	.9107
7243	Francis Pharmacy, Indianapolis.	None.	62.90	.9114
7244	W. H. Burget, Indianapolis.	None.	64.95	.9120
7253	H. O. Atehinson, Indianapolis.	None.	64.45	.9124
7304	Jno. C. Luken, Richmond.	None.	64.20	.9112
7305	J. S. Adams, Richmond.	None.	65.60	.9130
7308	W. H. Dickinson, Richmond.		64.40	.9126
7309	T. F. McDonnell, Richmond.		64.80	.9126
7355	H. E. Franer & Co., Indianapolis.		65.00	.9129
7368	Ferd A. Mueller, Indianapolis.		65.00	.9122
7539	_____, Indianapolis.	None.	64.50	.9116
7610	C. H. Overman, Marion.		64.10	.9134
7618	Hildebrand & Anseley, Marion.	None.	65.40	.9139
7712	_____, Indianapolis.	None.	64.20	.9090
8121	_____, Indianapolis.		64.53	
8126	_____, Indianapolis.		64.70	
8273	Fred R. Widmer, Dayton.	Negative.	65.0	.909
8410	J. Turicchi & Co., Muncie.	Negative.	64.3	.914
8433	C. W. Albersmeyer, Ft. Wayne.	Negative.	63.7	.912
8434	H. J. Bauer, Ft. Wayne.	Negative.	64.6	.911
8438	Jordan & Sherrard, Ft. Wayne.	Negative.	64.3	.913
8501	Red Cross Pharmacy, Logansport.	Negative.	62.9	.908
8506	Homer Closson, Logansport.	Negative.	64.4	.909
8573	May Ritter, Thorntown.	Negative.	64.2	
8738	Hugh Smith, Logansport.	Negative.	64.3	.908
8766	David P. Cox, Terre Haute.	Negative.	64.85	.908
8768	City Hall Pharmacy, Terre Haute.	Negative.	64.25	.909
8770	New Central Pharmacy, Terre Haute.	Negative.	64.35	.908
8771	Buntin Drug Co., Terre Haute.	Negative.	64.05	.909
8772	George W. J. Hoffman, Terre Haute.	Negative.	64.35	.909
8775	George Hess, Terre Haute.	Negative.	64.25	.908
8795	Conrad J. Herbert, Terre Haute.	Negative.	67.85	.913
8861	N. Rittson, Terre Haute.	Negative.	65.05	.910
8861	Carl Krietenstein, Terre Haute.	Negative.	63.75	.912
9307	J. J. Lacey & Son, Jasonville.	Negative.	64.5	.913
9634	Green Bros., Connersville.	Negative.	64.9	.913
9689	E. W. Swadley, Wabash.	Negative.	64.4	.912
9698	E. Gackenhelmer, Wabash.	Negative.	64.6	.913
9706	K. Bockman, Wabash.	Negative.	64.6	.912
9714	Bradley Bros., Wabash.	Negative.	65.0	.912
9732	E. E. Muhler, Sullivan.	Negative.	64.7	.913
9735	Ruddell Bros., Sullivan.	Negative.	64.6	.914
9836	Red Cross Drug Co., Tipton.	Negative.	64.9	.913
9860	Chickasaw Pharmacy, Peru.	Negative.	64.8	.913
9868	A. C. Pilkenton, Greenfield.	Negative.	65.1	.912
9872	M. C. Quigley, Greenfield.	Negative.	65.0	.913
9878	W. S. Pugh, Greenfield.	Negative.	65.1	.912

OLIVE OIL—ILLEGAL.

7799	Fred Schroeder, Evansville.	Present.	66.9	.914
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MAPLE PRODUCTS.

While in years past no article of food has been so generally mislabeled as have the maple products, at the present time all of the goods on the market conform to the legal standard. Of the 47 samples analyzed 25 were good and 22 adulterated. The number of adulterated samples is high because of the fact that a carload of sugar billed to Indianapolis was wrecked in transit and sold by the railroad company to a dealer in the habit of handling grocery supplies. He distributed the sugar at a low price among many of the Indianapolis grocers under the supposition that it was a pure maple product, when, as a matter of fact, it was largely cane sugar.

MAPLE SYRUP—LEGAL.

Lab. No.	Brand.	Manufacturer or Dealer.	Ash.	Alkalinity of Ash.	Direct Polarization.	Invert Polarization.	Sucrose.
6961	Maple Syrup	Mr. Lee Bedford, Indianapolis	.570	1.00	+ 64.2	-20.2	63.9
7024		E. M. Blessing, Danville	.740	1.06	+ 60.4	-22.2	62.6
7025		C. M. Gentry, Noblesville	.868	1.33	+ 58.2	-20.3	59.4
7032		McClintoc, Noblesville	.950	1.36	+ 53.2	-21.0	56.2
7115		Grant Isanogle, Muncie	1.124	1.32	+ 64.8	-19.8	64.0
7190		A. A. Zion, Indianapolis	.894	1.06	+ 58.8	-22.2	60.9
7212	Gilt Edge	J. F. Corcoran, Indianapolis	.60	.80	+ 6.30	-22.0	63.4
7382		N. M. Moore Gro. Co., Indianapolis	.774	1.32	+ 62.9	-33.0	72.6
7466	Premier	J. H. Groenbider, New Albany	.578	.96	+ 53.2	-16.8	52.2
7528		Moore Grocery Co., Indianapolis	.900	1.36	+ 56.2	-28.2	56.6
7699		Chas. Tyndall, Greenfield	.72	1.48	+ 26.0	-15.4	33.4
9167	Monarch	Reid Murdock Co., Chicago	.672	.92	+ 60.2	-19.8	60.0
10192		P. N. Hornaday, N. Manchester	.87	1.36	+ 40.8	-19.6	37.7

MAPLE SYRUP—ILLEGAL.

7360	Michigan Maple Syrup	F. N. Linder, Indianapolis	.426	.56	+ 81.6	+ 41.8	31.5
7393	Maple Leaf	New York Store, Indianapolis	.312	.48	+ 126.0	+ 112.4	10.3
9238		Williams Bros., Detroit	.15	.22	+ 45.0	-21.6	36.92
9197	Maple Drops	Taylor & Cross, Thornstown			+ 139.4	+ 125.6	10.4

MAPLE SUGAR—LEGAL.

Lab. No.	Brand.	Manufacturer or Dealer.	Ash.	Alkalinity of Ash.	Direct Polarization.	Invert Polarization.	Sucrose
6975		Chas. Raileback, Indianapolis	1.360	1.92	+ 59.6	-23.2	62.7
6976		E. A. Shultz, Indianapolis	2.040	2.20	+ 83.4	-28.6	69.7
6978		H. E. Herman, Indianapolis	.750	.76	+ 87.0	-17.8	79.3
7007		Chas. Raileback, Indianapolis	1.240	1.80	+ 83.2	-28.6	84.7
7109		Moore Grocery Co., Indianapolis	1.426	1.88	+ 87.6	-18.5	80.3
7180		J. McIlvain, Martinsville	1.460	1.04	+ 76.0	-26.6	77.1
7165		J. W. Lewis, Martinsville	1.400	1.36	+ 86.0	-30.0	87.2
7217		S. J. Halber, Orleans	4.018	5.20	+ 76.0	-27.6	76.4
7235		R. M. Mueller, Indianapolis	1.320	2.00	+ 83.4	-25.6	82.5
7314			1.100	1.64	+ 80.4	-27.6	81.8
8588		Yantis Wills, Delphi	.60	.60	+ 79.6	-24.0	76.22

MAPLE SUGAR—ILLEGAL.

6979		Frank Gross, Indianapolis*	.600	.68	+ 77.6	-27.1	79.3
6980	A. Candy	Navin's Drug Store, Indianapolis	1.195	.79			
6993	A. M. Co.	Gus Hauck, Indianapolis*	.530	.63	+ 85.6	-13.6	75.1
6994		Standard Grocery Co., Indianapolis	.200	.96	+ 89.4	-32.1	82.0
6995		Charles H. Rinne, Indianapolis*	.900	.68	+ 77.2	-24.6	77.1
6996		Frank M. White, Indianapolis*	.600	.64	+ 83.8	-28.6	85.1
7018		Gus Hauck, Indianapolis	.452	.60	+ 86.6	-12.6	75.1
7019		H. F. Niernan, Indianapolis	.430	.64	+ 89.0	-13.4	77.6
7033	Block Sugar	Deek Bros, Noblesville	.694	.76	+ 81.0	-12.24	70.7
7094	Manhattan Block Sugar						
7171		Frank Gross, Indianapolis*	.612	.76	+ 86.4	-33.0	90.4
7254		Robt. P. Woods, Martinsville	.830	.48	+ 110.0	-21.8	90.2
7454		Daniel L. Buser, Indianapolis*	.110	.12	+ 101.0	-11.8	84.1
7543		Gus A. Schimpff, Jeffersonville	.718	.76	+ 93.0	-24.8	89.2
7545		Indianapolis	.544	.72	+ 96.4	-0.0	73.0
9733	Sap	Indianapolis	.440	.56	+ 83.6	-28.8	85.1
7008		H. E. Dutton, Sullivan	.22	.36	+ 69.2	-20.8	46.75
7254		Ollick & Shane, Indianapolis	.144	.24	+ 101.2	-10.0	84.2
7550		Daniel L. Buser, Indianapolis	.11	.12	+ 101.0	-11.8	84.18
		Hays & Co., Frankfort	.792	.68	+ 85.8	-25.8	84.5

*This sugar was part of a cask damaged in shipment and sold by the Railroad Company as pure maple sugar.

SPICES.

In no article of food has the improvement in quality been more marked than in the case of spices. This is due in part to the fact that the trade is now handling spices in small paper cartons in place of the former custom of using bulk spices. Of the 265 samples examined but 12, or 4.5 per cent., were adulterated. Of 18 mustards analyzed all were pure; of 28 cloves, 27 were pure; of 18 gingers, all were pure; of 2 nutmegs, all were pure; of 60 cinnamons, 59 were pure; of 8 cayenne peppers, 7 were pure; of 82 peppers, 78 were pure, and of 48 allspice, 43 were pure. Several of the samples of allspice reported as adulterated were duplicate samples purchased for court purposes. It may be accepted as a fact that at the present time no impure spices are being placed on the Indiana market. The sale of compound spices has been prohibited. Compound spices made by mixing inert material, such as ground olive stones, cereals, ground cocoanut shells, etc., with genuine spices, are of little value to the consumer and cost him more than the pure product, because of the fact that the inert filler has to be paid for as well as the full price for the spice actually present.

MUSTARD—LEGAL.

Lab. No.	Manufacturer or Retailer.	Lab. No.	Manufacturer or Retailer.
7650	Woolson Spice Co., Toledo, Ohio.	8855	Will Wets, Columbus.
7738	Meyer Bros., St. Louis.	8866	W. L. Patrick, Columbus.
7756	Thompson-Taylor Co., Chicago.	8892	H. N. Dunlap, Franklin.
7788	Grand Union Tea Co., New York.	9039	R. A. Dunn, Stinesville.
7804	E. R. Durkee & Co.	9041	Louis Keller, Washington.
7868	Dwinell-Wright Co., Boston.	9045	W. E. Jeffrey, Washington.
7991		9084	I. J. Rich, Washington.
7999		9213	Charles Cooney Co., South Bend.
8297	Thompson & Taylor, Chicago.	9348	Thomas W. Irwin, Cannelton.

CLOVES—LEGAL.

Lab. No.	Manufacturer or Retailer.	Lab. No.	Manufacturer or Retailer.
7154	Albert Schillinger, Indianapolis.	7998	Siess Bros., Arcadia.
7157	Jon. D. Orabood, Indianapolis.	8002	Siess Bros., Arcadia.
7206	Daniel T. Buser, Indianapolis.	8055	Thompson-Taylor Co., Chicago.
7311	Brown & Cooper, Richmond.	8296	Thompson & Taylor Co., Chicago.
7649	Woolson Spice Co., Toledo, Ohio.	8306	S. & S. Coffee Co., St. Louis.
7726	D. G. Evans & Co., St. Louis.	8842	Newsom & Son, Columbus.
7731	C. F. Blanke & Co., St. Louis.	8844	James H. Clark, Columbus.
7740	Meyer Bros., St. Louis.	8851	Will Wets, Columbus.
7758	Thompson-Taylor Co., Chicago.	8864	W. L. Patrick, Columbus.
7792	Grand Union Tea Co., New York.	8891	H. N. Dunlap, Franklin.
7805	E. R. Durkee & Co.	9086	I. J. Rich, Washington.
7871	Dwinell-Wright Co., Boston.	9131	W. J. Hanger, Salem.
7876	Reid, Murdoch & Co., Chicago.	9229	L. M. Davis, Marengo.
7993	Siess Bros., Arcadia.		

GINGER—LEGAL.

Lab. No.	Manufacturer or Retailer.	Lab. No.	Manufacturer or Retailer.
7334	W. N. McGraw, Tipton.	8304	S. & S. Coffee Co., St. Louis.
7567	W. F. Meyer, Seymour.	8847	Jas. H. Clark, Columbus.
7647	Best Bros., Jeffersonville.	8854	Will Wets, Columbus.
7749	J. F. Bruning & Son, Evansville.	8861	W. L. Patrick, Columbus.
7806	Parson & Seelye, Evansville.	9037	R. A. Dunn, Stinesville.
7869	Urney & Kinser, Bloomington.	9042	Mrs. W. E. Jeffrey, Washington.
7994	—, Arcadia.	9063	I. J. Rich, Washington.
8004	—, Arcadia.	9127	Guy Neal, Salem.
8053	Thompson-Taylor Co., Chicago.	9227	L. M. Davis, Marengo.
8295	Thompson & Taylor Co., Chicago.	9349	Thomas W. Irwin, Cannelton.

CINNAMON—LEGAL.

Lab. No.	Manufacturer or Retailer.	Lab. No.	Manufacturer or Retailer.
7155	Albert Schelling, Indianapolis.	7859	J. J. Koch, Indiana Harbor.
7156	Job D. Orahoot, Indianapolis.	7872	Dwinell-Wright Co., Boston.
7158	Hareden W. Carter, Indianapolis.	7875	Jos. Strong & Co., Boston.
7162	Harry Mills, Indianapolis.	7992	Sless Bros., Arcadia.
7207	Austin, Nichols & Co., New York.	8028	Ulman, Dreyfus Co., Cincinnati.
7210	Canby, Asch & Canby, Dayton, Ohio.	8054	Thompson-Taylor Co., Chicago.
7237	R. M. Mueller, Indianapolis.	8129	O. L. Means, Shelbyville.
7251	H. O. Atchinson, Indianapolis.	8299	Thompson & Taylor Co., Chicago.
7263	S. C. Goff, Shelbyville.	8305	S. & S. Coffee Co., St. Louis.
7268	O. L. Means, Shelbyville.	8331	E. W. Harris, Crawfordsville.
7272	A. L. Aldrich, Rushville.	8667	Thompson-Taylor Co., Chicago.
7277	Court House Grocery, Rushville.	8764	W. W. Kaufman, Terre Haute.
7282	J. A. Craig, Rushville.	8848	George I. Whans, Columbus.
7312	Brown & Cooper, Richmond.	8856	Will Wets, Columbus.
7348	McCaffery Bros., Kokomo.	8862	W. L. Patrick, Columbus.
7385	Ed. Schaaf, Greentown.	8894	H. N. Dunlap, Franklin.
7392	W. H. Caven, Elwood.	9038	R. A. Dunn, Stinesville.
7327	Geo. Shortle, Jr., Tipton.	9044	W. E. Jeffrey, Washington.
7444	R. L. Leeson & Son Co., Elwood.	9062	I. J. Rich, Washington.
7499	M. A. Allyn, Muncie.	9126	Guy Neal, Salem.
7330	The Beeler Co., Tipton.	9129	W. J. Hanger, Salem.
7339	McKee & Rule, Kokomo.	9292	Robertson Bros., Linton.
7505	C. A. Cropper, Muncie.	9293	Enoch Murphy, Linton.
7648	Woolson Spice Co., Toledo.	9295	Mack Brown, Linton.
7673	W. G. Beiriger, Hammond.	9350	Thomas W. Irwin, Cannelton.
7729	C. F. Blanke & Co., St. Louis.	9800	Brodbeck Bros., South Bend.
7751	J. F. Bruning & Son, Evansville.	9885	Ulman's, Cincinnati.
7757	Thompson-Taylor Co., Chicago.	10310	F. Marsh, Rochester.
7791	Grand Union Tea Co., New York.	10319	C. A. Kilmer, Rochester.
7810	E. R. Durkee & Co.		

CINNAMON—ILLEGAL.

Lab. No.	Manufacturer or Retailer.	Remarks.
8846	James H. Clark, Columbus	Adulterated with ground olive stones.

CAYENNE PEPPER—LEGAL.

Lab. No.	Manufacturer or Retailer.	Lab. No.	Manufacturer or Retailer.
7322	J. C. Lindsay, Tipton.	7809	E. R. Durkee & Co.
7727	D. G. Evans & Co., St. Louis.	8845	James H. Clark, Columbus.
7741	Meyer Bros., St. Louis.	9081	I. J. Rich, Washington.
7793	Grand Union Tea Co., New York.		

WHITE PEPPER—LEGAL.

Lab. No.	Manufacturer or Retailer.	Remarks.
7743	E. R. Dune, New York City	

PEPPER—LEGAL.

Lab. No.	Manufacturer or Retailer.	Lab. No.	Manufacturer or Retailer.
7153	Ernest Knop, Indianapolis.	7874	Jos. Strong & Co., Terre Haute.
7161	Harry Mills, Martinsville.	8056	Thompson-Taylor Co., Chicago.
7167	O. E. Toner, Martinsville.	8235	W. M. Griffin Co., Ft. Wayne.
7173	Payne & Clarkson, Martinsville.	8298	Thompson & Taylor, Chicago.
7208	Austin, Nichols & Co., New York.	8302	S. & S. Coffee Co., St. Louis.
7236	R. M. Mueller, Indianapolis.	8307	Thompson & Taylor Co.
7238	C. W. Verberg, Indianapolis.	8386	Sims & Ohl, Mulberry.
7241	Francis Pharmacy, Indianapolis.	8666	Thompson-Taylor Co., Chicago.
7261	S. C. Goff, Shelbyville.	8839	Frohman Bros., Columbus.
7266	O. L. Means, Shelbyville.	8841	Newsom & Son, Columbus.
7270	A. L. Aldrich, Rushville.	8853	Will Wetz, Columbus.
7275	Court House Grocery Co., Rushville.	8863	W. E. Patrick.
7280	J. A. Craig, Rushville.	9012	All. Williams, Bloomfield.
7323	W. N. McGraw, Tipton.	9036	R. A. Dunn, Stinesville.
7326	Geo. Shortle, Jr., Tipton.	9040	H. F. Vollman Grocery Co., Washington.
7329	The Beeler Company, Tipton.	9085	I. J. Rich, Washington.
7338	McKee & Rule, Kokomo.	9125	Guy Neal, Salem.
7343	Williams Bros., Kokomo.	9130	W. J. Hawger, Salem.
7351	W. J. Webb, Kokomo.	9135	Kelly & Allman, Peru.
7443	R. L. Leeson & Sons Co., Elwood.	9138	McCauley & Co., Peru.
7448	A. J. Redding, Anderson.	9148	S. W. Smith, Peru.
7500	M. A. Allyn, Muncie.	9226	L. M. Davis, Marengo.
7504	C. A. Cropper, Muncie.	9239	Eddy & Eddy, St. Louis.
7520	H. R. Dosse & Co., Cincinnati.	9303	Oliver Specker, Jasonville.
7528	J. B. Piner, Muncie.	9347	Thomas W. Irwin, Cannelton.
7646	Woolson Spice Co., Toledo, Ohio.	9793	Charles Wagener, South Bend.
7675	John A. Tolman, Chicago.	9795	G. C. Muesel & Son, South Bend.
7713	Firchuff Bros., Whiting.	9798	Brodbeck Bros., South Bend.
7728	D. G. Evans & Co., St. Louis.	9802	Salinger Bros., South Bend.
7742	E. R. Dune & Co., New York City.	9933	E. C. Harley Co., Dayton, Ohio.
7748	J. F. Bruning & Son.	9984	Ullman's, Cincinnati, Ohio.
7760	Newton Tea & Spice Co., Cincinnati.	9991	Ullman's, Cincinnati, Ohio.
7789	Grand Union Tea Co., New York.	10302	L. E. Downie, Rochester.
7802	Reid, Henderson & Co., Chicago.	10309	F. Marsh, Rochester.
7807	E. R. Durkee & Co.	10318	C. A. Kilmer, Rochester.
7856	Steenbergen, Indiana Harbor.	10320	R. S. Lowery's, Rochester.
7870	Dwinell-Wright Co., Boston.		

PEPPER—ILLEGAL.

Lab. No.	Manufacturer or Retailer.	Remarks.
7248	W. H. Burget, Indianapolis.....	Adulterated with ground olive stones.
7166	O. C. Toner, Martinsville.....	Adulterated with ground olive stones.
7384	Ed. Schaaf, Greentown.....	Adulterated with cayenne pepper.
8849	George I. Winans, Columbus.....	Adulterated with ground olive shells.

ALLSPICE—LEGAL.

Lab. No.	Manufacturer or Retailer.	Lab. No.	Manufacturer or Retailer.
7149	Jno. F. Maurman, Indianapolis.	7759	Thompson-Taylor Co., Chicago.
7159	Harlen W. Carter, Indianapolis.	7790	Grand Union Tea Co., New York.
7163	Harry Mills, Martinsville.	7806	E. R. Durkee & Co.
7174	Payne & Clarkson, Martinsville.	7996	
7205	Daniel S. Buser, Indianapolis.	8005	
7209	Canby, Asch & Canby, Dayton.	8294	E. Bierhaus & Sons, Vincennes.
7262	S. C. Goff, Shelbyville.	8303	Bierhaus Bros., Vincennes.
7271	A. L. Aldrich, Rushville.	8843	James H. Clark, Columbus.
7276	Court House Grocery, Rushville.	8852	Will Wets, Columbus.
7325	W. N. McGraw, Tipton.	8865	W. L. Patrick, Columbus.
7328	Geo. Shurtle, Jr., Tipton.	8892	H. N. Dunlap, Franklin.
7331	The Beeler Co., Tipton.	9042	W. E. Jeffrey, Washington.
7340	McKee & Rule, Kokomo.	9128	Guy Neal, Salem.
7349	McCaffery Bros., Kokomo.	9136	Kelly & Allman, Peru.
7445	R. L. Leeson & Son Co., Elwood.	9147	S. W. Smith, Peru.
7447	A. J. Redding, Anderson.	9661	M. Wernger & Son, Connersville.
7501	M. A. Allyn & Co., Muncie.	9929	E. C. Harley Co., Dayton, O.
7506	C. A. Cropper, Muncie.	10063	Sam Hunziker, Michigan City.
7529	J. B. Piner, Muncie.	10069	Finske's Grocery, Michigan City.
7676	John A. Toloman, Chicago, Ill.	10070	Finske's Grocery, Michigan City.
7739	Meyer Bros., St. Louis, Mo.	.....	O. A. Wellnitz, Michigan City.
7750	J. F. Bruning & Son, Evansville.	10321	R. S. Lowrey, Rochester.

ALLSPICE—ILLEGAL.

Lab. No.	Manufacturer or Retailer.	Remarks.
7267	O. L. Means, Shelbyville.	Adulterated with ground cocoonut shells
7730	Evansville Coffee Co., Evansville.	Ground olive stones present.
9035	R. A. Dunn, Stinesville.	Ground olive stones present.
9067	I. J. Rich, Washington.	Ground cocoonut shells present.
7279	J. A. Craig, Rushville.	Ground cocoonut shells present.

TOMATO CATSUP.

Old stocks of tomato catsup are still found at the grocery stores that are illegally labeled, or are colored and preserved. All new goods, however, conform to the requirements of the law in regard to labeling, and, if benzoate of soda is used as preservative, it is so stated on the label.

BEERS, WINES AND SUMMER DRINKS.

Of the 14 beers analyzed all were pure. The same statement is generally true of the non-alcoholic summer drinks, such as ginger ales, soda, etc. The use of preservatives has been entirely abandoned. Occasionally summer drinks are found sweetened with saccharin, but this imposition is but little practiced at the present time.

CATSUPS—ILLEGAL.

Lab. No.	Article.	Brand.	Manufacturer.	Benzoate of Soda.	Color.	Remarks.
7699	Tomato Ketchup		Danville.			
7697	Chili Sauce	Sunny Side	Tip Top Ketchup Co., Cincinnati.	Present.	Coal Tar Dye.	Adulterated, Starch present.
7693	Tomato Catsup	Alameda	Alameda Packing Co., Cincinnati.	Present.	Coal Tar Dye.	Adulterated, Starch present.
7671	Tomato Ketchup	Bordeaux	Van Camp Packing Co., Indianapolis.	Present.	Natural.	Adulterated, Starch and Salicylic Acid.
7662	Tomato Catsup		Lots & Schramm Co., Alleghany, Pa.	Present.	Natural.	Adulterated.
8142			Wm. E. Byers, Zionsville	Present.	Natural.	Adulterated.
8184			Edwin Stines, Delphi	Present.	Artificial.	Adulterated with Saccharin and Starch.

BEERS—LEGAL.

Laboratory Number	Brand.	Manufacturer.	Alcohol, Gms. Per 100 c. c.	Extract, Gms. Per 100 c. c.	Phosphoric Acid.	Total Acids as Lactic.	Vol. Acids as Acetic.	Sulphurous Acid.	Specific Gravity, Original Wort.	Extract, Original Wort.	Dewar of Fermentation.	Immersion Reading.		
												Diastilate.	Extract.	Original.
8700	Rudolph	Anheuser-Busch Co., St. Louis.	3.75	5.102	.0819	.169	.012	2.2	1.0476	12.60	59.52	20.4	24.7	41.6
8701	Blue Ribbon	Pabst, Milwaukee.	3.15	5.404	.0885	.118	.012	3.3	1.0442	11.70	53.84	19.4	35.9	41.3
8702	Gold Medal	Indianapolis Brewing Co.	3.57	4.425	.0825	.166	.012	2.9	1.0437	11.57	61.71	20.1	32.0	38.8
8703	Progress	Indianapolis Brewing Co.	3.57	4.500	.0397	.144	.012	2.2	1.0440	11.64	61.34	20.1	32.3	39.1
8691	E. & J. Beerte	Ed. & Jno. Beerte, Dublin.	6.27	6.436	.024	.124	.0528	0.0	1.0711	18.96	66.69	24.8	40.0	52.0
8692	Würzburger	Fr. Hollender, Germany.	3.45	5.505	.026	.0819	.0066	0.0	1.0470	12.46	55.20	19.9	36.3	43.1
8693	Pilsner	Schlitz, Milwaukee.	3.83	5.027	.1136	.0621	.014	1.8	1.0464	12.287	59.12	20.2	34.4	41.1
8694	Schlitz	Fr. Hollender & Co., Germany.	3.83	4.901	.0889	.219	.018	2.3	1.0459	12.16	59.70	20.2	33.9	40.2
8695	A. B. C.	American Brewing Co., Indianapolis.	3.87	5.304	.0608	.180	.012	2.05	1.0482	13.04	59.35	20.6	35.5	42.0
8696	Dog Head	Read Bros., London, England.	6.45	5.757	.024	.189	.0576	0.0	1.0088	18.65	69.16	25.1	37.3	50.0
8697	Dog's Head	Read Bros., London, England.	5.93	4.290	.0702	.075	.0144	3.7	1.0604	16.15	73.43	24.2	31.5	42.5
8698	Olden English Ale	Indianapolis Brewing Co.	4.33	4.525	.030	.097	.0182	2.6	1.0497	13.18	65.70	21.4	32.4	39.1
8699	Weiss	Indianapolis Brewing Co.	3.27	2.208	.030	.3060	.0300	0.0	1.0343	8.749	72.47	19.6	23.2	29.7
8695	Weidemann	Circle Park Bar, Indianapolis.	2.97	4.650	.035	.0585	.003	0.035	1.0401	10.590	56.06	19.1	32.0	37.8

CARBONATED SOFT DRINKS—LEGAL.

Laboratory Number	Brand	Manufacturer	Alcohol, Gms. Per 100 c. c.	Extract, Gms. Per 100 c. c.	Total Acids as Citric.	Volatile Acids as Acetic.	Polarisation.		Sucrose Gms. Per 100 c. c.	Immersion Reading.		
							Direct.	Invert.		Original.	Dilute.	Extract.
8764	Lemon Soda.	Yunker Bros.	35	11.214	.064	.0000	+40.6	-11.2	9.7	58.9	15.0	59.0
8920	Pop.	O. W. Keefer, Attica.	0.0	8.279	.038	.0000	+34.0	-13.6	9.0	48.9	14.4	47.4
8926	Pop.	O. W. Keefer, Attica.	0.0	8.699	.000	.0000	+32.0	-7.4	7.5	48.8	14.2	49.0
8927	Pop.	O. W. Keefer, Attica.	0.0	8.070	.000	.0000	+16.4	-2.8	3.6	47.2	14.2	46.5
8928	Iron Brew.	C. E. Smith.	0.0	7.769	.000	.0000	+18.2	-5.2	4.5	33.3	15.0	45.3
8929	Lemon Soda.	O. W. Keefer, Attica.	35	4.751	.000	.0000	+12.0	-8.0	3.7	45.8	14.8	45.7
8930	Lemon Sour.	Lebanon Bottling Works, Lebanon.	21	7.869	.081	.0000	+18.0	-11.2	5.5	43.5	15.5	43.4
8931	Soda.	C. E. Smith.	70	7.759	.027	.0012	+19.8	-6.6	5.0	44.6	14.2	44.6
8932	Iron Brew.	J. Metzger, Indianapolis.	0.0	7.692	.034	.0006	+17.4	-10.0	5.1	47.5	15.0	47.2
8933	Soda.	J. Metzger, Indianapolis.	35	8.246	.109	.0000	+19.0	-8.0	5.1	51.5	14.7	51.4
8934	Iron Brew.	J. Metzger, Indianapolis.	14	9.303	.130	.0000	+14.6	-7.0	4.0	45.6	14.6	45.6
8935	Dark Soda.	C. A. Habich & Co., Indianapolis.	0.0	7.844	.061	.0000	+19.2	-14.0	6.2	59.2	14.4	58.9
8936	White Soda.	Fassatti & Co., Indianapolis.	0.0	11.18	.150	.0006	+31.0	-9.0	8.3	47.7	14.0	47.7
8937	Chocolate Soda.	Fassatti & Co., Indianapolis.	0.0	8.372	.020	.014	+34.6	-11.2	8.7	49.4	14.4	49.2
9003	White Soda.	Fassatti & Co., Indianapolis.	0.0	8.749	.014	.012	+28.4	-7.4	6.7	42.0	14.0	42.0
9004	Rad Soda.	Fassatti & Co., Indianapolis.	0.0	6.939	.020	.0000	+27.0	-11.8	7.3	54.8	14.2	54.8
9005	Rad Soda.	Aquos Water Co., Indianapolis.	0.0	10.158	.190	.0000	+35.2	-4.4	1.2	28.2	28.2	27.0
9072	Lemon Soda.	L. Cramer, Indianapolis.	8.12	28.405	.57	.036	+65.6	+35.2	5.7	27.4	14.8	28.8
91637	Blackberry Cordial.	Farmer's Home, Indianapolis.	7.70	32.555	.30	.066	+3.2	-5.2	1.0	28.5	14.8	28.8
9164*	Blackberry Brandy.	Earl Adams, Terre Haute.	21	3.496	.27	.0000	+18.0	-9.2	5.7	46.4	14.4	46.5
9243	White Pop.	Earl Adams, Terre Haute.	0.0	8.070	.000	.0000	+25.4	-3.0	5	51.3	14.4	51.3
9244	Lemon Sour.	Henry Becker, Terre Haute.	0.0	3.672	.000	.0000	+18.6	-2.6	4.0	52.9	14.2	53.9
9245	Orange Cider.	Henry Becker, Terre Haute.	0.0	9.454	.078	.0000	+14.0	-14.0	0.0	00.0	16.2	00.0
9246	Lemon Pop.	J. T. Stork, Terre Haute.	84	0.993	.190	.0000	+74.6	-11.0	4.8	76.0	14.0	75.0
9247	Orange Pop.	J. T. Stork, Terre Haute.	0.0	3.148	.000	.0000	+0.0	-8.8	1.7	49.0	14.0	48.7
9248	Hick's Cola.	Edgar Coffin, Terre Haute.	0.0	15.233	.190	.0000	+32.6	-9.4	7.9	47.0	14.2	46.9
9249	Orange Pop.	Edgar Coffin, Terre Haute.	0.0	8.623	.013	.0000	+32.6	-9.4	7.9	47.0	14.2	46.9
9250	Cocoa Cola.	Edgar Coffin, Terre Haute.	0.0	8.623	.013	.0000	+32.6	-9.4	7.9	47.0	14.2	46.9
9251	Peppin Soda.	Edgar Coffin, Terre Haute.	0.0	8.171	.013	.0000	+32.6	-9.4	7.9	47.0	14.2	46.9

*Improperly labeled.

†Contain glucose.

BEVERAGES—LEGAL.

Lab. No.	Article.	Manufacturer.
7015	Apple Juice.....	Freeman Grape Juice Co., Freeman, Ohio. Marshall Bottling Works, Springfield, Ill.
7417	Grape Juice.....	
8008	Malt Ayle.....	
7987	Coffee.....	F. P. Pyke, Indianapolis. C. C. Brandt & Co., Los Angeles. Mooney-Mueller Drug Co., Indianapolis. Crown Cordial Extract Co., New York.
7128	Chocolate Syrup.....	
7201	Lemon Juice.....	
7385	Rock Candy Syrup.....	
7399	Lemon Syrup.....	

BEVERAGES—ILLEGAL.

Lab. No.	Article.	Manufacturer.	Remarks.
7182	Strawberry Syrup.....	Red Cross Drug Store, Greencastle ...	Illegal, adulterated with salicylic acid.

GINGER ALE—LEGAL.

Laboratory Number.	Manufacturer.	Alcohol, Gms. Per 100 c. c.	Extract, Gms. Per 100 c. c.	Acids.		Polarization.		Sucrose, Gms. Per 100 c. c.	Immersion Reading @ 20° C.			Saccharin.	Benzoate Soda.	Salicylate Soda.
				Total as Citric	Volatile as Acetic	Direct.	Invert.		Original.	Distillate.	Extract.			
9002	C. E. Ritter & Co., Dayton, Ohio.	0.0	10.138	.180	.0000	+27.0	-11.8	7.3	40.9	14.2	54.8	None....	None....	None.
9071	Aquos Distilled Water Co., Indianapolis	.14	10.107	.170	.0008	+12.0	-12.0	4.5	55.9	14.7	54.6	None....	None....	None.
9190	Becker, Terre Haute.	0.0	7.114	.06	.0012	+20.0	-8.4	5.4	42.0	14.5	42.7	None....	None....	None.
8999	C. A. Habich & Co., Indianapolis	.28	8.246	.150	.0000	+8.8	-9.8	3.7	46.5	14.9	47.2	None....	None....	None.
8998	A. C. Schuyler, New York.	.21	9.806	.168	.0012	+16.0	-11.4	5.2	52.6	14.8	53.4	None....	None....	None.
8690	Cantrell & Cochranes, Dublin, Belfast.	0.0	7.442	.106	.0024	+10.4	-7.6	4.4	43.0	14.5	44.0	None....	None....	None.
8751*	Klee & Coleman.	.21	3.218	.106	.0012	+0.0	-0.0	0.0	26.6	14.8	27.2	Present...	None....	None.

*Adulterated.

CANNED VEGETABLES.

Twenty samples of canned vegetables were examined. Of this number 16 were found to be good and four were adulterated with saccharin.

CANNED VEGETABLES—LEGAL.

Lab. No.	Article.	Brand.	Manufacturer.
7125	Kidney Beans.....	French Kidney Beans.....	Illinois Canning Co., Hoopestown, Ill.
7013	Sweet Corn.....	Tecumseh.....	Vincennes Canning Co.
7014	Sweet Corn.....	Tecumseh.....	Vincennes Canning Co.
7092	Sugar Corn.....	Ko-We-Ba.....	Kothe, Wells & Bauer, Indianapolis.
7126	Corn.....	American Corn.....	Grafton-Johnson, Greenwood.
7344	Corn.....	.....	Williams Bros., Kokomo.
7396	Sugar Corn.....	Naomi.....	Naomi Canning Co., Edinburg, Ind.
7953	Sugar Corn.....	Elephant.....	Bloomington Canning Co.
8259	Corn.....	No. 814.....	Schnull & Co., Indianapolis.
8260	Corn.....	No. 376.....	Schnull & Co., Indianapolis.
8261	Corn.....	No. 815.....	Schnull & Co., Indianapolis.
8397	Corn.....	Sweet Meat.....	W. R. Allyn, Muncie.
8443	Corn.....	Orinda.....	Preston Rider, Columbus.
8482	Corn.....	.....	Louis Dieckmann, Logansport.
10336	Corn.....	.....	Franklin Canning Co., Franklin.
10336	Corn.....	Princess.....	Franklin Canning Co., Indianapolis.

CANNED VEGETABLES—ILLEGAL.

Lab. No.	Article.	Brand.	Manufacturer.	Remarks.
7361	Corn.....	Tip Top.....	Grafton-Johnson Co., Tipton.....	Adulterated with saccharin.
7766	Corn.....	.....	....., Indianapolis.....	Adulterated with saccharin.
7467	Petit Pois.....	.....	Leart & Nichol, Indianapolis.....	Adulterated with saccharin.
8409	Corn.....	Fame.....	, Greenwood.....	Adulterated with saccharin.

VINEGARS.

The adulteration of cider vinegar still continues. Of 87 samples analyzed 43, or 49.4 per cent., were adulterated. This figure is a great improvement over the report of last year, but still falls far short of what should obtain in a state devoted largely to the production of fruit. The greater number of cider vinegars reported as illegal were manufactured by farmers. It is possible for standard cider vinegar to be produced on the farm, but it is not probable that such vinegar will be made if the present lax and ignorant methods of manufacture continue to be followed. Cider vinegar cannot be made by allowing cider to ferment and then acetify, unless conditions of ventilation and temperature are carefully watched. Of the 9 samples of colored distilled vinegar analyzed, all were pure.

CIDER VINEGAR—ILLEGAL.

Lab. No.	Brand.	Manufacturer or Dealer.	Acidity as Acetic Acid.	Solids.	Ash.	Alkalinity of Ash.	Polarization.	Lead Acetate Precipitate.	Color.	Remarks.
7012	Cider	Rocheater	3.85	2.15	233	18.0	+0.2	Slight	Normal	Artificial
7114	Cider	Indianapolis	4.16	3.18	036	2.0	0.0	None	Artificial	Below standard
7123	Pure Cider	J. H. & B. Am., Indianapolis	3.83	3.28	026	4.0	+0.6	Slight	Artificial	Below standard
7150	Cider	Indianapolis	4.57	2.25	286	28.0	+0.2	Very slight	Normal	Not a normal cider vinegar.
7172	Cider	Martinsville	4.80	2.35	300	20.0	+0.2	Heavy	Partly caramel	Not a normal cider vinegar.
7179	Cider	Mrs. Harriet Carson, Danville	4.64	1.24	084	8.0	0.0	None	Caramel	Not a normal cider vinegar.
7202	Cider	Indianapolis	4.10	1.89	372	22.0	+2.4	Very slight	Normal	Not a normal cider vinegar.
7264	Cider	Shelbyville	3.42	1.65	021	10.0	0.0	None	Normal	Artificial
7289	Cider	Shelbyville	3.07	1.98	031	6.0	0.0	None	Caramel	Artificial
7273	Cider	A. L. Aldrich, Rushville	3.70	2.63	163	6.0	+2.6	Heavy	Normal	Not a normal cider vinegar.
7245	Cider	Williams Bros., Kokomo	3.70	2.06	063	4.0	0.0	None	Caramel	Low in acidity
7860	Cider	Rochester	3.00	2.20	250	26.0	-1.8	None	Natural	Below standard
8069		Arcadia	3.80							
8100		Arcadia	3.69							
8101		Arcadia	0.85							
8189		Lebanon	2.61	0.65	145	8.0	0.0	Heavy	Natural	
9169		Marble	2.70	1.750	304	32.0	0.0	Normal	Natural	
9196		Blymouth	2.47	2.580	475	40.0	0.0	Slight	Normal	
9557		J. H. Eaten, Ft. Wayne	2.61	2.400	380	14.0	0.0	Heavy	Normal	
9610		Chris. Stark, New Canaan	2.63	2.400	385	22.0	+0.0	Normal	Decolorized	
9673		Chris. Stark, Rolling Works, Terre Haute	3.98	1.774	028	2.0	+0.0	None	Natural	
9674		Hirsch Bros., Ft. Wayne	3.53	2.013	360	42.0	-3.8	Heavy	Normal	
9677		Price & Lucas, Louisville	3.48	2.305	325	34.0	-1.8	Heavy	Normal	
9676		Mooreville	3.22	2.190	135	22.0	-1.8	Heavy	Normal	
9676		Mooreville	2.27	1.405	200	12.0	-0.8	Heavy	Normal	
9697		Mooreville	2.63	1.110	235	18.0	+0.0	Heavy	Normal	
9698		Higgins & Co., Marion	3.80	0.215	038	6.3	+2.9	None	Caramel	
10056		Franklin	2.80	0.975	020	16.0	+1.0	Heavy	Normal	
10074		Lebanon	2.23	1.650	215	24.0	+0.0	Very light	Normal	
9211		Lebanon City	3.31							
8715		Wm. Stoncipher, New Albany	1.98	2.315	450	22.0		Very heavy	Normal	
8702		Benjamin Johnson, New Albany	3.35	3.570	460	46.0	+0.0	Very heavy	Normal	
9397		John Stull, New Albany	5.10	0.945	050	2.0	+1.2	None	Caramel	
9395		Good Bros., Graceland	1.66	1.480	280	30.0	+0.0	Heavy	Normal	
9696		The Beeler Co., Tipoon	4.95	1.391	071	4.0	+0.0	None	Caramel	
7332		J. H. Eaten, Ft. Wayne	4.81	1.350	190	14.0	+0.0	Slight	Normal	
8676		J. A. Craig, Rushville	4.55	.462	196	6.0	+0.0	None	Caramel	
7281		Court House Grocery, Rushville	3.55	.765	086	4.0	+0.0	None	Caramel	
7278		Caleb M. Eaton, Franklin	4.40	.373	.025	2.0	+4.0	None	Slight decoloris	
8876		W. R. Turman, Sullivan	4.06							
9749										

GRAIN VINEGAR—LEGAL.

Lab. No.	Manufacturer.	Where Collected.	Acidity as Acetic Acid.	Solids.	Ash.	Alkalinity of Ash.	Polarization.	Lead Acetate Precipitate.	Color.
7767	.....	Kokomo.....	5.52	.....	.....	.....	.....	.....	.....
7768	.....	Kokomo.....	5.68	.....	.....	.....	.....	.....	.....
7867	Urney & Kinser.....	Bloomington.....	4.29	.0239	0.04	2.0	+ .4	None...	Caramel

DISTILLED VINEGAR—LEGAL.

Lab. No.	Manufacturer.	Acidity as Acetic Acid.	Solids.	Ash.	Alkalinity of Ash.	Polarization.	Lead Acetate Precipitate.	Color.
7767	J. J. Foster, Kokomo.....	5.52	.....	.....	.....	.....	.....	.....
7768	J. J. Foster, Kokomo.....	5.68	.....	.....	.....	.....	.....	.....
7867	Urney & Kinser, Bloomington.....	4.29	0.239	0.04	2.0	+ .4	None...	Caramel
8837	Faulkner Preserve Co., Indianapolis.....	9.6	.....	.....	.....	.....	.....	.....
9033	H. F. Vollmer, Washington.....	4.6	.27	0.027	4.	0.0	None...	Caramel
9054	L. J. Rich, Washington.....	4.09	.052	.030	2.	0.0	None...	Caramel

MISCELLANEOUS FOOD PRODUCTS.

Under this head is placed a variety of subjects. Of the 82 samples examined, 72 were good and 10 were bad, equivalent to a percentage of adulteration of 12.1 per cent.

DRUGS.

During the year 598 samples of drugs have been collected and analyzed. Of this number 296 have been pure and 302, or 50.9 per cent., have been adulterated. During 1906 the percentage of adulteration was 62.5 per cent. A slight increase in percentage of purity is noted, but conditions have not improved along the line of drugs as satisfactorily as with food products. The reason for the low grade of drugs is difficult to explain. The wholesale drug trade in Indiana is in the hands of reliable, conscientious, successful merchants. The retail druggists are, as a rule, men of high standing in the community. The wholesale trade has taken many precautions since the passage of the Pure Food Law to eliminate from their stock all goods not of U. S. P. strength, or goods improperly labeled, and we believe the retailer has, so far as he has been able, taken from his stock every preparation the character of which he did not know. In order to determine, if possible, why drugs are so heavily adulterated, in so far as an explanation from the retailer will show, we sent to 404 dealers warning notices describing the character of goods purchased from their stock that were found to be illegal, and asked them to explain these results. Of the warning

notices sent out we have received 312 replies. An examination of these replies reveals some very interesting conditions. Thirty-eight retailers gave an explanation for the composition of their lime water; 17 of them acknowledged carelessness in manufacture or storage, and nine stated that they used lime water tablets. Ninety-nine dealers whose tincture of iodine was found to be below standard attributed that fact to improper storage or to careless manufacture, improper solution, etc. Nineteen dealers used old formulas which did not call for the addition of potassium iodide. In two cases the clerk's error was evidently responsible for the results. Fifty-nine druggists explained the fact that their tincture of iron was below standard by stating that they purchased a solution of chloride of iron from the wholesaler and diluted according to formula. Ten admitted careless manufacture or storage and 7 the use of an old formula. Nine could give no explanation; one was made by the former owner of the store; 16 blamed the wholesaler for crude drugs or fluid extract; one said it was the fault of his clerk, and one was made from old stock. It is impossible to draw any conclusion from the analyses as to the quality of the solution chloride of iron handled by the wholesaler. Their formula calls for dilution, and if the retailer follows directions, goods so diluted should be up to standard. Thirty-six replies from Tr. of Capsicum show five to have been made from an old formula; 3 could give no explanation; 3 admitted carelessness in preparation or dispensing; 2 were made by former owners of stores; 17 laid it to the door of the wholesaler in furnishing drugs that were not right; one said it was the fault of his clerk; 3 were made from old stock, one used maceration instead of percolation, and one said the alcohol had evaporated. Carelessness in preparing was the cause for one sample of Tr. of Ginger being below standard; one was the fault of the wholesaler in selling impure drugs; one was made from old stock, and one was made from ginger root. In the case of Spirits of Camphor, two used old formulas. Ten could not explain; one said it was carelessness in preparing or dispensing, and one was made by a former owner; two said it was the wholesaler who was to blame; one was the fault of a clerk; one suggested that the camphor gum might have contained paraffin; one said it was caused by faulty calculation; two said formula was incorrect, and two laid it to their scales. Sixteen retailers explained the illegal sale of black antimony by saying that they bought the goods from the wholesaler and supposed the goods to be pure. One retailer stated that he paid 12 cents a pound for a preparation, which, upon

analysis, proved to be coal dust; this is at the rate of \$144 a ton, a rather expensive price for slack coal. Forty-five dealers reporting as to the quality of their precipitated sulphur, in every case stated that they purchased pure goods from the wholesaler. It is apparent that the trade in black antimony and in precipitated sulphur is entirely demoralized. There is no reason why either one of these articles should be furnished a retailer in other than a pure state. The fact that the preparations are used in veterinary practice or in ointments has no bearing on the case at issue. Carelessness in manufacture and the storage of preparations such as lime water, tincture of iodine and tincture of iron in loosely stoppered bottles seems to be the most reasonable explanation for failure on the part of the retailer to comply with the law. The use of old formulas and pharmacopoeias of an edition abandoned twenty years ago also explains many results that seem impossible to the druggist who uses every care in compounding his preparations. In only three instances does the retailer lay the quality of his goods to the clerk's error, and in no case did the dealer admit wilful illegal sale. The conclusion to be drawn from this brief summary of facts is that the retail drug trade should observe more care in the preparation of its goods, discard old formulas, buy pharmacopoeias of the latest edition and insist upon guarantees of purity from the wholesaler with whom it deals. The purchaser of drugs, whether he be physician or layman, can take cognizance of none of these explanations. He expects to obtain pure and standard goods, and it must be the duty of the retailer to dispense to him what he requires and pays for.

Inspectors report sanitary conditions of drug stores to be on the whole satisfactory. Occasionally proprietors are found who do not realize as they should the necessity for cleanliness, especially around the soda fountains. Many fountains have been inspected which were in a dirty and unsanitary condition. One inspector reports 50 draft tubes to be stopped up with accumulated dirt and sediment; another that a dead rat was found in the base of the fountain. A drug store is, from the very character of the business, an attractive place. Clean floors, polished counters, shining mirrors, neatly arranged rows of shelf bottles are found in every modern drug store. The prescription case, usually out of sight of the customer, is not so carefully cared for in many instances, nor is the stock room or cellar always properly kept. Of 892 drug stores inspected during the year, not a single one was found to be in bad condition. Twenty-nine were found to be uncleanly and therefore classed as poor; 270 were in fair shape; 521 were good and 72

were in excellent condition. Second inspections show a decided improvement, and at the end of another year's work, it is probable that there will be no further necessity for sanitary inspections of drug stores. The stocks of patent and proprietary articles are changing complexion rapidly under the influence of the new Federal requirements, and appear in a guise so strange and new as hardly to be recognized. Stocks of goods on hand at the present time do not require any statement on the label as to the alcohol, opium, cocaine and morphine content until March 1, 1908. It is advisable, however, that all druggists take steps at once to dispose of these old stocks, so that when the drug law goes into full effect, it will not be necessary for the department to condemn quantities of unsold goods.

LIME WATER. (LIQUOR CALCIS.)

Fifty-seven samples of lime water were analyzed during the year. Of this number 29 were of U. S. P. strength and 38 were below standard. This is equivalent to a percentage of adulteration of 56.7 per cent. One year ago the percentage of adulteration was 45.1 per cent. These figures indicate a more serious condition at the present time with the Pure Food and Drug Law in active operation, than before it went into effect. There is absolutely no excuse for this condition, and no druggist should escape the responsibility placed upon him by the law, when he prepares and dispenses a medicine of very little cost, which is to be used in treating infantile disorders, that does not conform to the strictest pharmacopoeial requirements. Many druggists are disposed to ignore or treat lightly the fact that they are dispensing an impure lime water. Others, realizing the seriousness of their fault, have said that it was impossible to buy a lime that would make a standard water, and that the pharmacopoeial requirements were too stringent. In order to determine the truth of this assertion, 7 samples of lime, purchased from the lime yards at the city of Indianapolis, were used in preparing lime water. The results are given in the table below.

LIME WATER (LIQUOR CALCIS), PREPARED FROM LIME COLLECTED FROM INDIANAPOLIS COMPANIES.

No.	Variety of Lime.	From Whom Purchased.	Date of Purchase	Date of Preparation.	$\frac{n}{10}$ H ₂ SO ₄ CC.	U. S. P. %.
1	Portland	A. B. Meyer & Co.	8-15-1907	9-26-1907	18.1	95.2
2	Huntington	Aldag & Coonse	8-15-1907	9-26-1907	17.8	93.6
3	Huntington	Frank M. Dell	8-15-1907	9-26-1907	18.6	97.8
4	Bedford	Pierson Building Co.	8-15-1907	9-26-1907	22.4	118.1
5	Blue River and Mitchell slacked. .	Indianapolis Mortar Co. .	8-15-1907	9-26-1907	21.7	114.2
6	Huntington	Wales Coal Co.	8-15-1907	9-26-1907	19.8	104.2
7	Huntington	Malott Coal Co.	8-15-1907	9-26-1907	19.9	104.7

Forty-one days elapsed between the purchase of the lime and its preparation. The lime was in different shapes and of decidedly different grades, and one sample was slacked; yet, in spite of these conditions, all of which could be improved upon by the druggist, the lowest sample analyzed gave a U. S. P. value of 93.6 per cent., while the highest was 118.1 per cent. pure. Even the slacked lime produced a lime water 14.2 per cent. stronger than was required.

LIME WATER—LEGAL.

Lab. No.	Retailer.	Per Cent. U. S. P. Strength.
9208	Charles Coonley & Co., South Bend.	115.5
9241	Aug. Schreiber & Son, Tell City.	106.3
9636	L. E. Green, Connersville.	112.6
9640	O. Elliott, Connersville.	105.2
9697	E. Gackenhelmer, Wabash.	104.2
9817	Simon Herr, Brasil.	106.3
10168	J. B. Wehrle, Anderson.	123.6
10169	J. A. Rust, Anderson.	120.0
10170	W. C. Roush, Anderson.	105.7
10171	E. T. Brickley, Anderson.	113.6
10173	George A. Cock, Anderson.	106.4
8062	Sheridan's Pharmacy, Evansville.	113.6
8147	H. E. Zimmer, Indianapolis.	116.8
8150	Hoskins & Miller, Indianapolis.	108.1
8174	J. T. Foxas, Indianapolis.	110.5
8198	J. D. Pierson, Indianapolis.	109.4
8428	J. J. Brink, Ft. Wayne.	105.1
8592	M. M. Murphy, Delphi.	118.9
8765	Baur Pharmacy, Terre Haute.	104.7
8832	O. H. Mennet, Columbus.	106.4
8834	Ernest Stahlbuth, Columbus.	114.7
8836	H. M. Holmes, Columbus.	109.9
8886	D. H. Miller, Franklin.	104.2
8887	W. B. McCollough, Franklin.	105.2
9067	Smith & Winton, Washington.	103.6
9075	H. J. Linderman, Washington.	113.6
9090	B. Seal & Co., Loogootee.	112.6
6986	Chas. W. Eichrodt, Indianapolis.	115.7
6988	E. H. Wilson, Indianapolis.	111.5
6992	Empire Drug Store, Indianapolis.	114.7
7028	Haag's Pharmacy, Indianapolis.	111.5
7030	Carnefer Bros., Indianapolis.	116.9
7223	West Baden Springs Drug Co., West Baden.	107.3
7227	McCoy Drug Co., French Lick.	121.0
7231	Julius Hoag, Indianapolis.	111.6
7245	W. H. Burget, Indianapolis.	120.0
7356	Herman E. Franer & Co., Indianapolis.	113.6
7436	Wm. Rudder & Co., Salem.	122.1
7439	Robertson Drug Store, Salem.	113.6
7455	C. E. Crocelina, New Albany.	124.2
7461	Wm. C. Paul, Jeffersonville.	101.0
7465	Floyd Parks, Jeffersonville.	122.1
7852	A. G. Schluber, East Chicago.	116.8
7943	The Lafayette Pharmacal Co., Lafayette.	120.0

LIME WATER—ILLEGAL.

Lab. No.	Retailer.	Per Cent. U. S. P. Strength.	Remarks.
7029	E. W. Tompkins, Indianapolis	128.42	Adulterated.
7050	W. E. Axline, Noblesville	96.84	
7120	A. G. Baldwin, Noblesville	135.7	Not a pure lime water
7303	A. G. Luken & Co., Richmond	38.68	
7359	Ferd. A. Mueller, Indianapolis	74.7	
7371	A. E. Creelius, New Albany	0.0	
7614	R. L. Lander, Marion	78.8	
8150	H. J. Huder, Indianapolis	60.0	
8203	Wm. F. Werner, Indianapolis	96.8	
8829	T. E. Otto, Columbus	88.4	
8540	Horace W. Harbaugh, Attica	73.6	
9306	L. J. Lacey & Son, Jasonville	65.2	
9649	S. O. McKennan, Connersville	91.0	
9651	L. Ashworth, Connersville	57.9	
9683	R. E. Clark, Wabash	27.3	
9709	K. Bockman, Wabash	45.7	
9717	Bradley Bros., Wabash	79.4	
10357	V. E. Silverburg, Muncie	91.06	
7605	Freel & Mason, Marion	38.9	
7611	C. H. Overman, Marion	43.4	
8158	B. T. Fisher, Indianapolis	0.0	
7540	J. R. Eganbright, Indianapolis	22.1	

LIME WATER TABLETS—LEGAL.

Lab. No.	Retailer.	Per Cent. U. S. P. Strength.
10378	_____, Rochester	103.6
10377	_____, Indianapolis	121.5

LIME WATER TABLETS—ILLEGAL.

7928	_____, Indianapolis	38.9
8921	_____, Indianapolis	19.5
9998	_____, Indianapolis	75.2

GLYCERINE.

Eight samples of glycerine were analyzed. Six of these samples were below standard. The character of the glycerine on the market is the same as last year. No evidence of fraud on the part of the retailer is evinced, but these unsatisfactory results do indicate carelessness on the part of the wholesale trade supplying this article.

GLYCERINE—LEGAL.

Lab. No.	Retailer.	H ₂ SO ₄ .	Butyric Acid.	Sulphates.	Specific Gravity.
8045	B. S. Muller, Evansville	Brown color	Present	Trace	1.2448
7621	Hildebrand & Ansley, Marion	Light straw	Present	Present	1.2561

GLYCERINE—ILLEGAL.

7081	_____, Indianapolis	Brownish	Present	Trace	1.255
7090	Louis Stockman, Indianapolis	Brownish	Present	Trace	1.254
7232	Julius Hoag, Indianapolis	Yellowish	Present	Trace	1.2474
7250	H. O. Atchinson, Indianapolis	Yellowish	Present	Very slight trace	1.2471
7631	J. W. Hoover, Jeffersonville	Light straw	Present	Trace	1.2482
7721	Fred M. Petersheim, Evansville	Brownish	Present	Trace	1.2537

WITCH HAZEL. (AQUA HAMAMELIDIS.)

Seven samples of witch hazel were analyzed. Six were U. S. P. and one was below standard. The use of formaldehyde as a preservative in witch hazel is evidently somewhat common.

WITCH HAZEL—LEGAL.

Lab. No.	Retailer.	Alcohol by Volume at 20° C.	Specific Gravity.
7955	E. B. Merritt, Frankfort.....	12.63	
8906	C. H. Albersmeyer, Ft. Wayne.....	13.4	
9693	E. W. Swadley, Wabash.....	13.49	.9805
9701	E. Gackenheimer, Wabash.....	13.49	.9805
9711	K. Bockman, Wabash.....	13.19	.9807
9720	Bradley Bros., Wabash.....	14.89	.9790

WITCH HAZEL—ILLEGAL.

Lab. No.	Retailer.	Alcohol by Volume at 20° C.	Remarks.
8432	C. W. Albersmeyer, Ft. Wayne.....	12.3	Formaldehyde present.

TINCTURE ARNICA. (TINCTURA ARNICAE.)

Seventeen samples of Tr. of Arnica analyzed all proved to be in accordance with the pharmacopoeia requirements. No sample contained wood alcohol.

TINCTURE OF ARNICA—LEGAL.

Lab. No.	Retailer.	Alcohol by Volume.	Solids per 100 C.C.	Specific Gravity.
*7570	W. F. Peters, Seymour.....	24.7	3.71	.9663
8430	J. J. Brink & Son, Ft. Wayne.....	36.2	1.41	
8458	George W. Haynie, Evansville.....	40.1	2.19	
8456	Charles Dawson, Mt. Vernon.....	38.0	3.00	
8450	D. & H. Rosenbaum, Mt. Vernon.....	34.2	3.68	
8660	Wm. H. Peters, Madison.....	40.7	3.14	.9520
8711	John M. Dike, North Vernon.....	38.6	3.25	.9635
8713	G. W. Banta, North Vernon.....	43.2	2.57	.9475
9237	G. S. Dusch, Tell City.....	41.3	2.23	.9510
9685	R. E. Clark, Wabash.....		4.02	.9586
9690	E. W. Swadley, Wabash.....		3.60	.9509
9699	E. Gackenheimer, Wabash.....		3.19	.9477
9706	White Drug Store, Wabash.....		3.23	.9489
9719	Bradley Bros., Wabash.....		3.50	.9572
7224	Sloan Drug Co., French Lick.....	40.3	2.61	.9458
7457	M. F. Doherty, Jeffersonville.....	43.6	2.77	.9520
7566	W. F. Meyer, Seymour.....	46.2	1.49	.9425

*Very low in alcohol.

SPIRITS OF CAMPHOR. (SPIRITUS CAMPHORAE.)

Sixty-five samples of Spirits of Camphor were analyzed. Fifteen were pure and fifty were below standard, equivalent to an adulteration of 76.9 per cent. Spirits of Camphor is below strength either because of the use of a smaller amount of camphor than is required, or of dilute alcohol. The high price of camphor gum is, no doubt, in part responsible for the inferior grade of camphor sold. There is also a disposition on the part of some druggists to sell a dilute product in order to meet the competition of the grocery store dispenser of camphor water.

SPIRITS OF CAMPHOR—LEGAL.

Lab. No.	Retailer.	U. S. P. Strength Camphor.	Alcohol by Volume.	Specific Gravity.
7022	Fred A. Mueller, Indianapolis.....	100.0		
7045	Cain & Lewilyn, Indianapolis.....	115.0	87.4	
7046	F. J. Wehrel, Indianapolis.....	105.0	87.2	
7071	Ernest C. Stowers, Indianapolis.....	100.0	89.7	
7216	Maurice Schwartz, Indianapolis.....	100.0	88.2	
7307	J. S. Adams, Richmond.....	105.0	82.0	
7374	C. D. Knofel, New Albany.....	171.6		
8707	C. F. Harper & Co., Madison.....	100.8	84.1	
8828	T. E. Otto, Columbus.....	100.0	81.6	
9184	W. H. Rogers, Madison.....	108.3	85.3	
9236	C. S. Dusch, Tell City.....	100.0	85.8	
9635	L. E. Green, Connersville.....	100.8	85.3	.8315
9700	E. Gackenheimer, Wabash.....	112.5	85.8	.8312
10265	W. G. Sims, Swaysee.....	112.5	82.5	.8325
10272	P. R. McLeod, Summitville.....	108.3	79.2	.8387

SPIRITS OF CAMPHOR—ILLEGAL.

9747	Reed & Batey, Sullivan.....	32.5	43.2	
7052	A. G. Baldwin, Noblesville.....	89.2	56.1	
7074	Alexander B. Gauld, Indianapolis.....	79.2	68.2	
7087	Robert Navin, Indianapolis.....	75.0	54.6	
7089	Louis Stockman, Indianapolis.....	96.6	88.7	
7234	Julius Hoag, Indianapolis.....	66.6	90.4	
7247	W. H. Burget, Indianapolis.....	97.5	69.9	
7249	H. O. Atchinson, Indianapolis.....	70.8	89.7	
7363	J. H. Conner & Co., New Albany.....	80.0	77.4	
7435	H. C. Hobbs, Salem.....	91.6	81.0	.8500
7511	R. Walter, Lawrenceburg.....	40.0	61.2	.9043
7525	C. W. Fitch, Lawrenceburg.....	75.0	67.8	.8562
7574	C. W. Milhouse, Seymour.....	79.1	88.2	.8283
7571	W. F. Peter, Seymour.....	80.0	89.2	.8270
7764	, Seymour.....	95.8	87.7	.8315
7609	C. H. Overman, Marion.....	87.5	87.4	.8336
7887	C. O. Maple, Bloomington.....	85.8	84.0	.8343
7889	Thos. J. Penrod, Bloomington.....	73.3	69.3	.8786
8431	C. W. Albersmeyer, Ft. Wayne.....	85.0	85.6	
8664	W. H. Rogers, Madison.....	69.1	58.8	
8710	John M. Dils, North Vernon.....	40.8	86.7	
8717	Don Davis, North Vernon.....	86.6	84.6	
8820	Hauser & Parker, Columbus.....	83.3	84.1	
8712	G. W. Bantz, North Vernon.....	51.6	48.0	
9211	, South Bend.....	84.1	87.0	.8243
9216	C. W. Taulman, Corydon.....	73.3	81.0	
9223	L. A. Riley & Son, Corydon.....	90.8	84.6	
9235	E. R. Brundick, Huntingburg.....	85.0	87.0	
9345	E. F. Cumming, Cannelton.....	84.1	85.6	
9361	Bohrer Drug Co., Boonville.....	85.0	82.3	
9591	O. L. Bishop, Shelbyville.....	72.5	83.6	.8418
9594	S. H. Heustis, Shelbyville.....	76.6	88.7	
9601	Robt. W. Buxton, Shelbyville.....	84.1	85.8	.8248
9603	Stanley Jones, Shelbyville.....	95.8	57.6	.9014

SPIRITS OF CAMPHOR—ILLEGAL—Continued.

Lab. No.	Retailer.	U. S. P. Strength Camphor.	Alcohol by Volume.	Specific Gravity.
9639	O. Elliott, Connersville.	58.3	50.6	.9168
9650	S. O. McKennan, Connersville.	96.6	87.0	.8307
9653	L. Ashworth, Connersville.	62.5	57.6	.9077
9694	E. W. Swadley, Wabash.	67.5	86.1	.8305
9710	K. Bockman, Wabash.	99.1	81.7	.8360
9721	Bradley Bros., Wabash.	84.1	79.5	.8506
10248	W. B. Teeter, Upland.	85.0	84.4	.8272
10278	Howard Bros., Summittville.	60.8	47.0	.9208
10288	Lawahe Drug Store, Swayzee.	92.5	83.3	.8300
10289	Fred Drake, Van Buren.	72.5	64.1	.8837
10287	Conwell & Son, Van Buren.	91.6	81.8	.8325
10002	Shadel's Drug Store, Plymouth.	72.5	84.4	.8277
9992	The People's Drug Store, Plymouth.	88.3	82.5	
10033	Ed. Smith, New Castle.	66.6	74.1	.8608
10380	D. P. Campbell & Bro., Muncie.	87.5	82.5	.8325
8719	O. W. Stephenson, Orleans.	29.1	43.2	

TINCTURE OF CAPSICUM. (TINCTURE CAPSICI.)

Of the ninety-six samples of Tr. of Capsicum analyzed, 43 were pure and 53 adulterated. This is equivalent to a percentage of adulteration of 55.2 per cent. Tr. of Capsicum should contain at least one gram of extract to the 100 cc. and should contain about 90 per cent. of alcohol. Many samples were found to be colored either with turmeric or coal tar dye. This has been particularly true of tinctures prepared by the dispensing druggist from powdered capsicum, and the results can only be explained by the fact that much of the powdered drug heretofore sold has been of inferior stock partially exhausted and dyed to improve its appearance.

TINCTURE OF CAPSICUM—LEGAL.

Lab. No.	Retailer.	Alcohol by Volume.	Solids per 100 C.C.	Specific Gravity.
7011	J. C. Clark, Indianapolis.		1.78	
7044	Cain & Llewellyn, Indianapolis.	86.7	1.28	
7047	F. J. Wehrel, Indianapolis.	88.7	1.71	
7214	Duckworth Pharmacy, Indianapolis.	87.2	1.66	
7458	Schwaninger Bros., Jeffersonville.	90.7	1.33	.8348
7523	C. W. Fitch, Lawrenceburg.	89.2	1.10	.8263
7524	C. R. Mills, Lawrenceburg.	83.4	1.17	.8478
7526	Mark Kennedy, Lawrenceburg.	85.3	3.04	.8422
7541	French Lick Drug Co., French Lick.	87.5	2.47	.8453
7573	C. W. Millhouse, Seymour.	85.0	1.61	.8426
7644	Ben Doolittle, Jeffersonville.	84.2	1.61	.8442
7724	Meek & Albers, Evansville.	83.1	1.77	
7735	John Laval & Sons, Evansville.	85.8	1.36	
7879	Bowles Bros., Bloomington.	85.0	1.49	
8060	L. Wolfgang, Evansville.	85.0	2.40	
7725	Meek & Albers, Evansville.	83.1	1.66	
8425	B. R. Noll, Ft. Wayne.	81.4	1.19	
8457	Geo. W. Haynie, Evansville.	81.7	1.76	
8716	Don Davis, North Vernon.	81.2	1.16	
8718	O. W. Stephenson, Orleans.	85.3	1.12	
8827	T. E. Otto, Columbus.	83.3	2.76	
8830	C. W. Adams, Columbus.	84.2	2.89	
8888	W. B. McCollough, Franklin.	81.3	2.26	
9068	Smith & Winton, Washington.	84.2	2.42	.8429
9079	A. F. Schmidt, Washington.	82.7	2.00	.8372
9209	Charles Coonley & Co., South Bend.		2.40	.8342
9663	Tarleton & Tilford, Martinsville.	79.1	2.02	.8493

TINCTURE OF CAPSICUM—LEGAL—Continued.

Lab. No.	Retailer.	Alcohol by Volume.	Solids per 100 C. C.	Specific Gravity.
9955	Edgar Tarleton, Martinsville.	81.4	1.77	.8475
9954	Carleton's Drug Store, Martinsville.	84.1	1.34	.8393
10054	T. C. Basye, Rockport.	85.6	2.17	.8260
10091	Otto Kloefer, Michigan City.	80.3	1.57	.8523
10092	E. W. Lindemann, Michigan City.	82.4	3.21	.8418
10228	Eli Lilly Company, Indianapolis.	89.6	1.81	.8177
10324	P. M. Shore, Rochester.	89.4	1.11	.8210
10379	Weber Drug Company, Indianapolis.	83.4	2.59	.8385
10380	Huder's Pharmacy, Indianapolis.	85.1	2.57	.8382
10381	Francis Pharmacy, Indianapolis.	83.6	2.52	.8390
10382	Brink's Pharmacy, Indianapolis.	81.6	2.58	.8381
10402	Jno. B. Burrell, Brownstown.	89.6	1.17	.8188
10407	O. R. Emerson, Brownstown.	88.5	1.85	.8210
9545	F. S. Leadbetter, Connersville.	83.4	1.63	.8412
9586	E. W. Swadley, Wabash.	83.6	1.71	.8405
9595	E. Gackenheimer, Wabash.	83.1	2.15	.8410

TINCTURE OF CAPSICUM—ILLEGAL.

Lab. No.	Retailer.	Alcohol by Volume.	Solids per 100 C. C.	Specific Gravity.	Remarks.
10411	Samuel M. Smith, Osgood.	53.5	2.01	.9212	Below standard.
10147	Jos. F. Schaffer, Poseyville.	88.2	0.35	.8277	Below standard.
10126	H. G. May, Princeton.	83.8	0.58	.8378	Coal tar dye present.
10124	F. J. Biggs, Princeton.	90.3	0.78	.8187	Below standard.
10122	Clark & Son, Princeton.	60.1	3.35	.9139	Below standard.
9959	Roy Rigrish, Martinsville.	72.7	2.56	.8745	Alcohol below standard.
10409	R. J. Stillwell, Brownstown.	55.5	1.99	.9205	Below standard.
10314	Alex. Ruh, Rochester.	50.8	2.18	.9302	Below standard.
10306	Geo. V. Davis, Rochester.	63.5	1.95	.8960	Alcohol below standard.
9957	J. M. Carleton, Martinsville.	85.6	0.86	.8361	Low in extract.
9716	Bradley Bros., Wabash.	69.1	1.28	.8822	Alcohol too low.
9705	White Drug Store, Wabash.	82.4	1.59	.8423	Colored with tumeric.
9684	R. E. Clark, Wabash.	83.9	0.72	.8325	Extract too low.
10383	Ferger Pharmacy, Indianapolis.	84.5	1.83	.8370	Tumeric and coal tar color
9062	L. F. Nunemier, Washington.	84.6	1.04	.8282	Colored with tumeric.
9078	J. N. Jones, Washington.	68.5	1.58	.8803	Low in alcohol.
9094	Smith's Pharmacy, Loogootee.	43.6	0.80	.9412	Low in alcohol and solids.
9232	A. H. Miller, Jr., Huntingburg.	89.0	0.53	.8185	Low in solids and colored.
9354	J. A. Sargent, Rockport.	47.1	0.64	.9335	Low in alcohol and solids.
9356	T. C. Basye, Rockport.		0.78	.8423	Low in solids.
9359	L. W. Owens, Boonville.	91.4	0.35	.8170	Low in solids.
9362	Bohrer Drug Co., Boonville.	83.4	0.42	.9307	Coal tar color.
9363	Demberger Drug Co., Boonville.	87.9	0.65	.8397	Low in solids.
9746	Reed & Bates, Sullivan.	87.9	0.64	.8236	Low in solids.
10143	Ed. Shoptaugh, Princeton.	71.8	2.94	.8720	Alcohol low.
7220	Sherrod & Ludley, West Baden.	88.9	0.83	.8357	Low in solids.
7401	Wm. Manning, Greentown.	69.3	0.67	.8846	Low in solids and alcohol.
7437	Wm. Rudder & Co., Salem.	94.9	0.70	.8397	Below standard.
7442	Chas. McClintock, Salem.	88.7	0.73	.8186	Below standard.
7456	M. F. Doherty, Jeffersonville.	90.2	0.99	.8355	Low in solids.
7672	Ernest C. Stowers, Indianapolis.	90.4	0.71		Low in solids.
7073	Alexander B. Gauld, Indianapolis.	91.5	0.74		Low in solids.
7083	James R. Cole, Indianapolis.	86.1	0.80		Low in solids.
8890	R. C. Wood & Son, Franklin.	45.5	1.17		Very weak and low in alcohol
8882	C. H. Drybread, Franklin.	84.2	0.94		Tumeric color.
8885	D. H. Miller, Franklin.	84.9	1.70		Tumeric color.
8825	T. J. Noblett, Columbus.	41.2	0.96		Low in solids and alcohol.
8721	Troth Bros., Orleans.	82.7	0.73		Low in solids.
8659	W. H. Peters, Madison.	88.7	0.59		Below standard.
8708	C. F. Harper & Co., Madison.	54.8	0.70		Below standard.
8429	J. J. Brink & Son, Ft. Wayne.	44.0	0.94		Below standard.
8449	D. & H. Rosenbaum, Mt. Vernon.	51.2	1.22		Coal tar dye present.
8453	W. H. Fogas, Mt. Vernon.	83.1	0.92		Coal tar dye present.
8455	Charles Dawson, Mt. Vernon.	85.5	0.25		Coal tar dye present.
8330	Nye & Booe, Crawfordsville.		0.75		Below standard.
8315	Moore & Miller, Vincennes.	83.5	3.44		Poor quality.
8313	C. S. Miller, Vincennes.	87.4	1.46		Poor quality.
8293	S. H. Ross, Shoals.	59.8	0.93		Low in solids.
8050	Sheridan's Pharmacy, Evansville.	85.6	0.91		Coal tar dye present.
8088	Theodore Gerke, Evansville.	85.6	0.71		Coal tar dye present.
7883	J. C. Vermilyan, Bloomington.	89.7	0.53		Low in extracts.
7754	—, Evansville.	81.8	0.70		Coal tar dye present.
7722	Schnepfer's Pharmacy, Evansville.	84.5	1.31		Coal tar dye present.
7703	E. W. Stanfer, Hammond.	66.8	1.08		Low in alcohol.

TINCTURE GINGER. (TINCTURA ZINGIBER.)

Of the eighteen samples analyzed, 7 were pure and 11 were below standard. Tr. of Ginger should contain at least 90 per cent. of alcohol and, if prepared according to the pharmacopoeia from good ginger, should contain 1 per cent. or more of extract. Six samples of Essence of Jamaica Ginger analyzed were all of fair quality. Two samples contained somewhat less than the required amount of solids.

TINCTURE OF GINGER—LEGAL.

Lab. No.	Retailer.	Alcohol by Volume.	Residue Per 100 C. C.
7053	A. G. Baldwin, Noblesville.....	87.7	1.22
9648	S. O. McKennan, Connersville.....	83.5	1.24
9652	L. Ashworth, Connersville.....	84.0	1.09
9697	Daniel Stewart Drug Co., Indianapolis.....	88.2	1.22
7365	J. H. Conner & Co., New Albany.....	89.4	1.28
7370	McDonald, Stockell Co., New Albany.....	91.9	1.16
7723	Schlaepfer's Pharmacy, Evansville.....	87.8	1.01

TINCTURE OF GINGER—BELOW STANDARD.

7020	F. N. Voght, Indianapolis.....	86.7	0.63
7064	James R. Cole, Indianapolis.....	80.5	0.82
7086	Waddell & Walterhouse, Indianapolis.....	90.0	0.74
7225	Sloan Drug Co., French Lick.....	90.7	0.64
7568	Cox Pharmacy, Seymour.....	89.4	0.43
7527	Mary Kennedy, Lawrenceburg.....	91.5	0.43
9364	Denberger Drug Co., Boonville.....	58.5	4.43
9608	Ed. E. Jenkins, Shelbyville.....	89.6	0.89
8889	R. C. Wood & Son., Franklin.....	39.8	0.97
7569	Coe Pharmacy Co., Seymour.....	91.9	0.34
9593	Schroeder & Hoops, Shelbyville.....	82.4	0.68

TINCTURE OF IODINE. (TINCTURA IODI.)

Of 148 samples of Tr. of Iodine analyzed during the year, 88 were below standard, while 60 were pure. This is equivalent to a percentage of adulteration of 59.4 per cent. The explanation for this large percentage of adulteration is doubtless due to the fact that druggists are not sufficiently careful in following the U. S. P. method of preparation. Frequently shelf bottles are found which contain crystals of undissolved iodine. In such cases the tincture is usually found to be deficient in strength. There is no reason why a satisfactory Tr. of Iodine cannot be properly made if directions are followed. Two samples of Tr. of Iodine analyzed were 215.4 per cent. and 212.1 per cent., and were evidently made after old formulas. These tinctures have been classed as illegal. The use of tincture of this excessive strength would be attended with disastrous consequences to the patient, and the sale of goods far above standard should be discountenanced.

TINCTURE OF IODINE—LEGAL.

Lab. No.	Retailer.	Per Cent. U. S. P. Strength.
6990	Navin's Pharmacy, Indianapolis.	106.4
6991	Empire Drug Store, Indianapolis.	100.9
7027	Haag's Pharmacy, Indianapolis.	121.8
7030	E. W. Thompkins, Indianapolis.	103.1
7037	Rhodes' Pharmacy, Indianapolis.	108.2
7040	Bowens, Indianapolis.	104.2
7082	Henry E. Zimmer, Indianapolis.	102.3
7222	West Baden Springs Drug Co., West Baden.	99.6
7228	French Lick Drug Co., French Lick.	99.6
7246	W. H. Burget, Indianapolis.	113.2
7306	J. S. Adams, Richmond.	100.5
7310	T. F. McDonnell, Richmond.	104.2
7372	C. E. Crecelins, New Albany.	99.4
7375	C. D. Knofel, New Albany.	117.0
7438	Wm. Rudder & Co., Salem.	104.2
7704	E. R. Stauffer, Hammond.	113.0
7745	J. F. Bomm Drug Co., Evansville.	110.8
7755	Henry Tepe, Evansville.	100.9
7851	A. G. Schluher, East Chicago.	109.7
7878	Jno. W. O'Harrow, Bloomington.	110.8
7882	J. C. Vermilion, Bloomington.	104.5
7934	E. Bon Merritt, Frankfort.	104.5
8146	H. E. Zimmer, Indianapolis.	100.9
8155	Hoskins & Miller, Indianapolis.	104.5
8202	C. L. Zimmermann, Indianapolis.	103.1
8204	Wm. F. Werner, Indianapolis.	105.6
8205	L. W. Holmes & Co., Indianapolis.	102.0
8228	Cooley Drug Co., South Bend.	102.7
8250	Lafayette Pharmaceutical Co., Lafayette.	117.7
8262	Bowles Bros., Bloomington.	101.7
8264	Charles Pfizer & Co., New York.	100.3
8292	Sam H. Ross, Shoals.	139.8
8312	Charles S. Miller, Vincennes.	106.4
8314	Moore & Miller, Vincennes.	107.8
8320	B. M. Keene, Indianapolis.	136.1
8435	H. J. Bauer, Ft. Wayne.	107.5
9437	Jordan & Scherard, Ft. Wayne.	114.1
9454	W. H. Fogas, Mt. Vernon.	113.0
9739	Hugh Smith, Logansport.	107.1
9821	Hauser & Parker, Columbus.	104.5
9837	H. M. Holmes, Columbus.	111.5
9185	W. H. Holmes, Madison.	101.6
9240	Aug. Schreiber & Son, Tell City.	100.0
9355	T. C. Baayse, Rockport.	102.7
9682	R. E. Clark, Wabash.	114.6
9712	K. Bockman, Wabash.	105.5
9734	Joe K. Smock & Son, Sullivan.	100.5
9952	Tarleton & Tilford, Martinsville.	114.4
9956	J. M. Carleton, Martinsville.	101.6
9958	Roy Rigdish, Martinsville.	112.6
9960	D. W. Rigdish, Martinsville.	113.0
9993	The Peoples' Drug Store, Plymouth.	100.5
10046	G. E. Calloway, Cambridge City.	101.2
10090	O. Klepfer, Michigan City.	105.6
10242	Rothinghouse Bros., Gas City.	102.3

TINCTURE OF IODINE—B-FLOW STANDARD.

8626	B. J. Winger, Williamsport.	80.3
8665	W. H. Rogers, Madison.	88.5
8706	Gibson & Reidel, Madison.	98.3
8714	J. L. Daggett, North Vernon.	95.7
8720	Troth Bros., Orleans.	88.8
8826	T. J. Noblett, Columbus.	74.4
8833	O. H. Mennet, Columbus.	95.0
8883	C. H. Drybread, Franklin.	92.4
7383	John Fell, Greentown.	59.0
7400	Wm. Manning Drug Store, Greentown.	63.1
8218	Frank Heegan, Indianapolis.	66.4
8319	H. C. Raffensperger, Indianapolis.	81.1
8354	C. E. Miller, Indianapolis.	63.8
8355	George C. Morrison, Indianapolis.	81.1
8391	W. C. Watjen, Vincennes.	91.0
8502	Tritt's Drug Store, Logansport.	71.1

TINCTURE OF IODINE—BELOW STANDARD—Continued.

Lab. No.	Retailer	Per Cent. U. S. P. Strength.
8835	Ernest Stahlhuth, Columbus.	95.7
9063	L. F. Hunemeir, Washington.	88.8
9066	W. L. Jackson, Washington.	80.7
9080	A. F. Schmidt, Washington.	73.3
9092	G. W. Walker, Loogootee.	85.5
9166	Brewster & Thomas.	81.8
9217	C. W. Taulman, Corydon.	90.2
9222	L. A. Riley & Son, Corydon.	77.0
9234	E. R. Brundick, Huntingburg.	91.7
9343	H. A. Clark, Cannelton.	69.3
9357	A. D. Garlinghouse, Rockport.	81.1
9590	O. L. Bishop, Shelbyville.	85.3
9600	Robert W. Buxton, Shelbyville.	97.9
9602	Stanley Jones, Shelbyville.	72.0
9604	Richard M. Floyd, Shelbyville.	70.2
9607	Ed. E. Jenkins, Shelbyville.	92.9
9638	L. E. Green, Connersville.	60.1
9641	O. Elliott, Connersville.	86.2
9679	Franklin.	92.4
9703	E. Gackenheimer, Wabash.	96.8
9715	Bradley Bros., Wabash.	90.8
9954	Edgar Tarleton, Martinsville.	74.1
10001	Shadel's Drug Store, Plymouth.	78.8
10003	J. W. Rinard, Plymouth.	97.9
10012	Beam & Lynn, New Castle.	69.7
10072	Woodson & Willis, Michigan City.	92.8
10093	E. W. Lindemann, Michigan City.	92.8
10121	J. H. Clark & Son, Princeton.	65.3
10123	F. J. Biggs, Princeton.	99.4
10125	H. G. May, Princeton.	99.1
10142	Ed. Shoptaugh, Princeton.	92.8
10146	Joseph F. Schafer, Poseyville.	68.9
10277	Howard Bros., Summitville.	83.6
10305	Miller & Keith, Rochester.	88.8
10313	Alex. Rub, Rochester.	84.4
10329	Charles Majors, Dugger.	81.1
9353	J. A. Sargent, Rockport.	215.4
9830	Hardy Burns, Newport.	212.1
10403	Jno. B. Burrell, Brownstown.	64.5
10509	Taylor & Roth, Edinburg.	86.6
10410	Samuel M. Smith, Osgood.	80.3
10406	O. R. Emerson, Brownstown.	88.4
10404	Charles E. Greger, Brownstown.	80.3
10307	George V. Davis, Rochester.	91.7
10239	I. L. Klingensmith, Gas City.	78.5
6987	Charles W. Eichrodt, Indianapolis.	60.1
7035	Huders Drug Store, Indianapolis.	78.8
7061	W. E. Axline, Noblesville.	64.5
7068	Robert Navin, Indianapolis.	76.6
7233	Julius Hoag, Indianapolis.	95.4
7240	Francis Pharmacy, Indianapolis.	74.8
7252	H. O. Atchinson, Indianapolis.	82.5
7462	J. A. Graham, Jeffersonville.	55.7
7464	Floyd Parks, Jeffersonville.	81.1
7510	Stevens & Nichols, Muncie.	81.4
7604	Freel & Mason, Marion.	95.7
7613	R. L. Lander, Marion.	96.3
7678	Otto Negele, Hammond.	88.0
7701	A. E. Kepert, Hammond.	85.1
7733	Gottman Drug Co., Evansville.	51.3
7880	Bowles Bros., Bloomington.	59.0
7888	C. O. Maple, Bloomington.	96.7
7890	Thomas J. Penrod, Bloomington.	74.8
7942	Lafayette Pharmacal Co., Lafayette.	71.9
8048	S. B. Muller, Evansville.	88.0
8059	L. Wolfgang, Evansville.	74.8
8062	Wm. Fritsch, Evansville.	83.3
8090	Leon Curry, Evansville.	95.4
8151	H. J. Huder, Indianapolis.	96.8
8173	J. T. Fogas, Indianapolis.	91.3
8197	J. D. Pierson, Indianapolis.	85.5
8210	Cox Pharmacy, Indianapolis.	89.5
8211	M. Schwartz, Indianapolis.	93.5
8217	J. M. Scott & Son, Indianapolis.	94.3
8219	S. Muhl Drug Co., Indianapolis.	99.4
8422	C. B. Woodworth, Ft. Wayne.	66.0
8804	John F. Coulson, Logansport.	70.4
7133	Verl K. Osborn, Plainfield.	16.8

TINCTURE OF IRON. (TINCTURI FERRI CHLORIDI.)

Of the 68 samples of Tr. of Iron analyzed, 35 were pure and 33 adulterated, which is an equivalent to a percentage of adulteration of 48.5 per cent., a decided improvement over the results obtained last year. Tr. of Iron is reported as illegal when the amount of iron is less than that required by the pharmacopoeia.

TINCTURE OF IRON—LEGAL.

Lab. No.	Retailer.	Per Cent. U. S. P. Strength.	Iron.	Alcohol by Volume.
8137	Clyde O. Laughner, Whitestown.....	109.2	5.00	.....
8148	H. E. Zimmer, Indianapolis.....	101.6	4.65	58.1
8149	H. J. Huder, Indianapolis.....	107.1	4.90	55.6
8167	B. T. Fisher, Indianapolis.....	120.7	5.52	64.0
8230	Coonley Drug Co., South Bend.....	115.5	.....	.....
8231	Charles Coonley, South Bend.....	114.7	.....	.....
8274	Fred R. Widner, Dayton.....	101.0	4.62	.....
8279	Morgan & Dick, Crawfordsville.....	106.0	4.85	.....
8281	George D. Cook, Crawfordsville.....	104.9	4.80	.....
8392	W. C. Watjen, Vincennes.....	100.5	4.60	59.5
8423	Myers Bros., Ft. Wayne.....	128.2	5.77	53.6
8436	H. J. Bauer, Ft. Wayne.....	100.5	4.60	49.8
8503	W. H. Porter, Logansport.....	104.9	4.80	48.5
8616	Deidrich H. Wallace, Veederburg.....	100.5	4.60	.....
8542	C. F. Robinson & Son, Attica.....	100.5	4.60	.....
8591	M. M. Murphy, Delphi.....	107.1	4.90	.....
8661	Jas. Hargan, Jr., Madison.....	100.0	4.57	63.5
6989	E. H. Wilson, Indianapolis.....	103.8	.....	.....
7010	J. C. Clark, Indianapolis.....	108.2	.....	.....
7041	Bowens, Indianapolis.....	108.9	.....	.....
7048	C. L. Mitchell, Noblesville.....	101.5	.....	.....
7364	J. H. Conner & Co., New Albany.....	101.5	.....	.....
7384	Daniel Moroney, Indianapolis.....	104.2	.....	.....
7387	Fisher's Pharmacy, Indianapolis.....	134.2	.....	.....
7402	Jerome J. Keene, Indianapolis.....	104.8	.....	.....
7459	Schwaninger Bros., Jeffersonville.....	103.0	.....	.....
7659	 Indianapolis.....	103.8	.....	.....
9033	George S. Ellis, Terre Haute.....	102.6	4.7	48.7
9687	E. W. Swadley, Wabash.....	108.1	4.95	56.6
9728	Charles Pariah, Farmersburg.....	134.2	6.15	59.2
9752	J. R. Miller, Roachdale.....	120.7	5.52	47.0

TINCTURE OF IRON—ILLEGAL.

7131	Green & Watson, Plainfield.....	91.7	4.20	.....
7187	Herbert L. Wilson, Danville.....	99.3	4.55	33.3
7221	Sherrod & Ludley, West Baden.....	79.6	3.65	66.8
7389	Charles Hoch, Indianapolis.....	66.6	3.05	63.0
7391	Baird's Pharmacy, Indianapolis.....	82.9	3.80	27.9
7562	W. R. Ramsey, Mulberry.....	72.6	3.32	.....
7630	C. L. Thompson, Danville.....	74.3	3.40	.....
7632	J. W. Hoover, Jeffersonville.....	66.6	3.05	76.6
7736	John Laval & Sons, Evansville.....	69.9	3.20	73.5
7929	 Evansville.....	97.8	4.47	55.2
7938	Brown Drug Company, Lafayette.....	90.1	4.12	69.2
7951	Hogan Drug Company, Lafayette.....	46.4	2.12	.....
8236	M. F. Campbell & Co., Lebanon.....	55.1	2.52	.....
8237	Long, Etter & Co., Lebanon.....	92.8	4.25	.....
8246	Searcy & Hodge, Kirkin.....	93.4	4.21	.....
8413	Noah W. Myer, Crawfordsville.....	77.0	3.52	.....
8427	J. J. Brink & Son, Ft. Wayne.....	75.9	3.47	63.6
8524	Frank S. Vawter, Tipton.....	50.2	2.30	.....
8529	Henry Mehleg, Tipton.....	77.6	3.72	.....
8583	W. S. Margowski, Delphi.....	66.1	3.02	.....
8585	Lytle & Orr Co., Delphi.....	98.3	4.60	.....
8907	 Delphi.....	96.7	4.42	.....
8619	Hardy Sanger, Veederburg.....	67.2	3.07	.....
9015	R. E. Eveleigh, Bloomfield.....	91.7	4.2	35.4
9016	Bynum Bros., Boonville.....	92.2	4.22	61.8

TINCTURE OF IRON—ILLEGAL—Continued.

Lab. No.	Retailer.	Per Cent. U. S. P. Strength.	Iron.	Alcohol by Volume.
9017	Sbertzer Bros., Bloomfield.....	78.6	3.6	68.4
9294	Wm. J. Hamilton, Linton.....	85.7	3.92	64.4
9297	E. T. Sherwood, Linton.....	81.6	3.75	62.5
9300	John W. Ikard, Switz City.....	92.9	4.22	64.3
9302	Charles C. Williams, Jasonville.....	76.4	3.5	64.0
9681	R. E. Clark, Wabash.....	97.2	4.45	66.4
9696	E. Gackenhelmer, Wabash.....	95.6	4.37	56.6
9750	R. E. Eveleigh, Bloomfield.....	96.0	4.40	34.1
9824	N. M. Mendenhall, Brazil.....	71.5	3.27	66.4
9837	M. C. Van Dorn, Covington.....	84.7	3.87	37.7
9718	Bradley Bros., Wabash.....	94.5	4.32	65.7
9829	E. R. Stephens, Newport.....	97.8	4.47	68.4

BAY RUM.

The eight samples analyzed were found to be pure. The use of methyl alcohol in preparing this article has evidently been abandoned.

BAY RUM—LEGAL.

Lab. No.	Retailer.	Specific Gravity 20°C.	Ethyl Alc. by Vol. 20°C.
9065	W. L. Jackson, Washington.....	.9425	42.5
9076	H. J. Linderman, Washington.....	.9353	47.0
9077	J. N. Jones, Washington.....	.9398	44.6
9089	B. Seal & Co., Loogootee.....	.9343	47.6
9091	G. A. Walker, Loogootee.....	.9218	53.8
9093	Smith's Pharmacy, Loogootee.....	.9530	36.5
7213	Duckworth Pharmacy, Indianapolis.....		44.35
7620	Hildebrand & Ansley, Marion.....		41.24

BLACK ANTIMONY.

Five samples of Black Antimony were analyzed and all found to be adulterated, being nothing but powdered charcoal. Black antimony, which is a preparation used by veterinarians, is rarely ever found on the market in a pure state. At the present time the wholesale trade has discontinued the use of this term and is now selling its preparation of charcoal as "Horse Medley." An article so named is quite as valuable for medicinal purposes as when sold under the name of a drug which does not enter into its composition.

BLACK ANTIMONY—ILLEGAL.

Lab. No.	Retailer.	Per Cent. Residue Insol. in HCL.	Remarks.
8140	Knox & Company, Zionsville.....	94.7	Almost entirely charcoal.
8247	S. L. Kutz & Son, Kirklín.....	96.0	Almost entirely charcoal.
7941	E. M. Schnaible, LaFayette.....	94.13	Adulterated. Charcoal and iron salts.
7952	Hogan Drug Co., LaFayette.....	24.45	Adulterated. Charcoal and calcium.
7979	Fred Combs, Lebanon.....	55.68	Adulterated. Charcoal and calcium.

AQUA AMMONIA.

Of the 12 samples analyzed, nine were below strength. Aqua Ammonia loses strength rapidly when placed in an ordinary loose stoppered shelf bottle. The druggists should use precaution to keep such volatile drugs in carefully closed containers.

AQUA AMMONIA—LEGAL.

Lab. No.	Retailer.	U. S. P. Strength.	NH ₃ .	Specific Gravity @ 25°C.
10025	L. E. Kinsey & Co., New Castle.....	118.2	11.82	.9486
10043	F. E. Wills, Cambridge City.....	118.1	11.61	.9485
10358	D. P. Campbell & Bro., Muncie.....	118.0	11.80	.9495

AQUA AMMONIA—ILLEGAL.

9867	A. C. Pilkenton, Greenfield.....	48.8	4.88	.977
9873	M. C. Quigley, Greenfield.....	55.7	5.57	.973
10007	William Pence, New Castle.....	88.8	8.85	.9598
10049	Dr. Johnson, Cambridge City.....	59.1	5.91	.9718
10500	Ernst Stahlhuth, Columbus.....	80.6	8.03	.9635
10258	Fred Drake, Van Buren.....	72.8	7.28	.9667
10264	W. G. Sims, Swaysee.....	85.8	8.58	.9612
10499	T. J. Noblett, Columbus.....	57.4	5.74	.9728
9921	J. T. Butler, Knightstown.....	72.2	7.22	.9668

QUININE. (QUININAE SULPHAS.)

Seven samples of Quinine were analyzed and all found to be pure.

QUININE—LEGAL.

Lab. No.	Retailer.	Lab. No.	Retailer.
9885	W. S. Early, Greenfield.....	10005	William M. Pence, New Castle.
9862	A. C. Pilkenton, Greenfield.....	10017	G. F. Mowrer, New Castle.
9884	W. S. Pugh, Greenfield.....	10022	L. E. Kinsey, New Castle.
9912	N. Reeves, Knightstown.....		

CASTOR OIL.

The ten samples of castor oil analyzed all proved to be pure.

CASTOR OIL—LEGAL.

Lab. No.	Retailer.	Specific Gravity @ 25°C.	Butyro @ 20°C.	Polarisation @ 20°C.
9882	W. S. Pugh, Greenfield.....	.9570	79.8	12.6
9892	V. L. Early, Greenfield.....	.9570	80.4	12.7
9907	A. C. Fouche, Knightstown.....	.9580	80.3	12.6
9915	N. Reeves, Knightstown.....	.9575	80.5	12.7
9922	J. T. Butler, Knightstown.....	.9570	80.3	12.5
10008	William Pence, New Castle.....	.9565	80.9	12.6
10027	L. E. Kinsey & Co., New Castle.....	.9570	80.4	12.6
10034	Ed. Smith, New Castle.....	.9565	80.5	12.6
10247	W. B. Teeter, Upland.....	.9575	80.0	12.7
10274	P. R. McLeod, Summitville.....	.9570	80.3	12.9

BEESWAX.

Seven beeswax samples were analyzed. Of these six were pure and one was adulterated, being almost half paraffin.

BEESWAX LEGAL.

Lab. No.	Retailer.	Butyro Reading @ 55°C.	Melting Point Degree C.	Per Cent. of Beeswax.
7797	Vickery Bros., Evansville.....	32.0	.....	.....
9863	A. C. Pilkenton, Greenfield.....	32.1	62.5	100
9875	M. C. Quigley, Greenfield.....	29.7	63.5	100
9886	V. L. Early, Greenfield.....	31.2	62.5	100
10010	Beam & Lynn, New Castle.....	29.9	63.0	100
10018	C. F. Mowrer, New Castle.....	29.5	63.0	100

BEESWAX—ILLEGAL.

*7616	Hildebrand & Ansley, Marion.....	23.2		.54
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*Contained 46% paraffin.

MISCELLANEOUS DRUGS.

Many samples of chemicals usually carried in stock by druggists, have been analyzed and have been found to be free from adulteration. The chemicals supplied the drug trade are of good grade. The druggists' shelf bottles frequently contain chemicals which, because of their age, are unsatisfactory, but in other respects there is little evidence of adulteration.

RESULT OF ANALYSES OF DRUG SAMPLES.

Articles Examined.	Good.	Bad.	Total.	Per Cent. Adulterated.
Alcohol.....	4	1	5	20.0
Ammonia.....	3	9	12	75.0
Bay Rum.....	8	0	8	0.0
Beeswax.....	6	1	7	14.3
Black Antimony.....	0	5	5	100.0
Borax.....	2	0	2	0.0
Castor Oil.....	10	0	10	0.0
Glycerine.....	2	6	8	75.0
Lime Water.....	29	38	67	56.7
Paragoric.....	4	0	4	0.0
Spirits of Camphor.....	15	50	65	76.9
Tincture of Arnica.....	17	0	17	0.0
Tincture of Capsicum.....	43	53	96	55.2
Tincture of Ginger.....	12	7	19	36.0
Tincture of Iodine.....	60	88	148	59.4
Tincture of Iron.....	35	33	68	48.5
Witch Hazel.....	6	1	7	14.3
Quinine.....	7	0	7	0.0
Miscellaneous drug samples.....	33	10	43	23.0
Total.....	296	302	598	50.9

PROSECUTIONS.

It is not possible to judge of the efficacy of the Pure Food Law by referring to the list of convictions or estimating the fines assessed, nor is it advisable to employ such a method of arriving at the value of the law. Prosecutions are brought as a last resort. When all other methods of securing compliance are ineffectual it is then necessary to make use of that section of the law which provides for punishment of offenders. Since the passage of the law 223 cases have been brought against manufacturers or dealers who have violated some provision of the Food and Drug Law. Thirty-three of the defendants were acquitted by the court either because the evidence submitted by the State was insufficient, or there seemed some good reason for dismissing the case. The fines assessed amount to \$3,807.80.

The following table summarizes the reason upon which prosecutions were brought and shows the number of cases won and dismissed in each class :

PROSECUTIONS.

Article.	Total Number of Cases Brought.	Number of Cases Won.	Number of Cases Dismissed
Butter.....	26	20	6
Camphor.....	2	2	0
Cream of Tartar.....	1	1	0
Extracts.....	1	1	0
Foods exposed.....	4	4	0
Ice Cream.....	9	8	1
Lard.....	63	59	4
Lime Water.....	4	2	2
Maple Sugar and Syrups.....	7	1	6
Meats.....	22	18	4
Milk.....	47	41	6
Orange Cider, Orangeade.....	8	8	0
Sodas.....	1	1	0
Spices.....	3	1	2
Tinctures.....	3	3	0
Vinegars.....	10	8	2
Unsanitary conditions.....	14	14	0
Total.....	223	190	33

LIST OF PROSECUTIONS BROUGHT UNDER THE NEW FOOD AND DRUG LAW FROM APRIL 1 TO OCTOBER 31.

County.	Lab. No.	Name and Address of Defendant.	Illegal Sale of.	Information Filed.	Date of Trial.	Disposition of Case.	
						By the Court.	Final.
Allen	8681	G. R. Walters, Ft. Wayne	Port sausage	7-11-07	7-26-07		Settled, \$1 and costs.
Allen	8687	Cut Rate Meat Market, Ft. Wayne	Port sausage	7-11-07	7-26-07		Settled, \$1 and costs.
Allen	8676	J. H. Eaken, Ft. Wayne	Vinegar	7-11-07	7-26-07		Settled, \$10 and costs.
Bartolomew	8613	Rudolph Schniers, Columbus	Milk	8-3-07	8-6-07		Settled, \$10 and costs.
Carroll	8689	Lew Wallis, Delphi	Lard	8-19-07	8-23-07		Settled, \$10 and costs.
Carroll	8704	J. E. Nance, Delphi	Meat	9-13-07	9-13-07		Settled, \$10 and costs.
Cass	8632	M. McCaffrey & Co., Logansport	Milk	8-26-07	8-8-07		Settled, \$10 and costs.
Cass	8733	G. W. Timberlake, Logansport	Milk	8-26-07	8-8-07		Settled, \$10 and costs.
Cass	8744	Z. Sewing, Logansport	Milk	8-26-07	8-8-07		Settled, \$10 and costs.
Cass	8745	C. I. Seybold, Logansport	Milk	8-26-07	8-7-07		Settled, \$10 and costs.
Cass	8743	F. W. Klein, Logansport	Milk	8-26-07	8-3-07		Settled, \$10 and costs.
Cass	8492	Edgers & Miller, Logansport	Lard	8-26-07	7-31-07		Settled, \$10 and costs.
Cass	8495	Robert McCains, Logansport	Lard	8-26-07	7-31-07		Settled, \$10 and costs.
Cass	8737	D. W. Fowlen, Logansport	Lard	8-26-07	7-31-07		Settled, \$10 and costs.
Cass	8481	Henry F. Drompp, Logansport	Lard	8-26-07	7-31-07		Settled, \$10 and costs.
Cass	8463	John Rabunz, Logansport	Lard	8-26-07	7-31-07		Settled, \$10 and costs.
Cass	8469	J. H. Foley & Co., Logansport	Lard	8-26-07	7-31-07		Settled, \$10 and costs.
Cass	8505	Homer Chosson, Logansport	Lard	8-26-07	7-31-07		Settled, \$10 and costs.
Clark	7642	W. R. Cooper, Jeffersonville	Milk	6-4-07	6-20-07		Settled, \$10 and costs.
Clark	7637	John Stimlar, Jeffersonville	Milk	6-4-07	6-21-07		Settled, \$10 and costs.
Clark	7632	Charles Hampel, Jeffersonville	Milk	6-4-07	6-19-07		Settled, \$10 and costs.
Clay	8628	Anderson Bros., Brazil	Butter	9-4-07	9-4-07		Settled, \$10 and costs.
Clay	8628	Dalser Restaurant, Brazil	Butter	9-4-07	9-4-07		Settled, \$10 and costs.
Clay	8628	J. W. Yeomum, Brazil	Ice Cream	8-28-07	8-28-07		Settled, \$10 and costs.
Clinton	8385	Leithner & Bryan, Mulberry	Lard	8-3-07	8-27-07		Settled, \$10 and costs.
Clinton	8343	Frank A. Aughe, Frankfort	Dirty milk	10-3-07	10-14-07		Settled, \$10 and costs.
Clinton	8343	W. H. Hassler, Frankfort	Dirty milk	10-3-07	10-14-07		Settled, \$10 and costs.
Clinton	8343	W. A. Huffine & Son, Kirelin	Dirty milk	10-3-07	10-14-07		Settled, \$10 and costs.
Floyd	8472	Geo. Chase, New Albany	Milk	10-1-07	10-7-07		Settled, \$10 and costs.
Floyd	8472	Frank E. Jollissant, New Albany	Milk	10-1-07	10-7-07		Settled, \$10 and costs.
Floyd	8472	John A. Weaver, New Albany	Milk	10-1-07	10-7-07		Settled, \$10 and costs.
Floyd	7428	J. W. Tipton, New Albany	Milk	6-26-07	7-31-07		Settled, \$10 and costs.
Floyd	7432	John S. Payne, New Albany	Milk	6-26-07	7-31-07		Settled, \$10 and costs.
Floyd	9135	John A. Weaver, New Albany	Milk	4-23-07	5-3-07		Settled, \$10 and costs.
Floyd	9396	Paul Argo, New Albany	Milk	8-1-07	8-26-07		Settled, \$10 and costs.
Floyd	9371	Paul Argo, New Albany	Milk	8-27-07	9-10-07		Settled, \$10 and costs.
Floyd	9396	F. E. Jollissant, New Albany	Milk	8-27-07	9-10-07		Settled, \$10 and costs.
Floyd	9396	Kate Dean, New Albany	Lard	8-30-07	9-10-07		Settled, \$10 and costs.

LIST OF PROSECUTIONS BROUGHT UNDER THE NEW FOOD AND DRUG LAW FROM APRIL 1 TO OCTOBER 31—Continued.

County.	Lab. No.	Name and Address of Defendant.	Illegal Sale of.	Information Filed.	Date of Trial.	Disposition of Case.	
						By the Court.	Final.
Floyd	9395	John Stull, New Albany.	Cider vinegar	9-19-07	9-17-07		Settled, \$10 and costs.
Floyd	9396	John Stull, New Albany.	Lard	9-19-07	9-17-07		Settled, \$10 and costs.
Floyd	9397	Benj. Jackson, New Albany.	Cider vinegar	9-19-07	9-17-07	Appeal taken	Settled, \$10 and costs.
Floyd	9398	Benj. Jackson, New Albany.	Cider	9-19-07	9-17-07	Appeal taken	Settled, \$10 and costs.
Floyd	9402	Wm. Starnes, New Albany.	Cider vinegar	9-19-07	9-17-07		Settled, \$10 and costs.
Fountain	8544	Fred Schepman, Attica.	Lard	8-21-07	9-9-07		Settled, \$10 and costs.
Fountain	8543	Don't V. Smith & Co., Attica.	Lard	8-21-07	9-9-07		Settled, \$10 and costs.
Fountain	8610	Merriman Bros., Covington.	Lard	8-21-07	9-9-07		Settled, \$10 and costs.
Fountain	8601	Frank Coleman, Covington.	Orangeade	8-21-07	9-19-07		Settled, \$10 and costs.
Fountain	8604	Zimmerman & Son, Covington.	Exposed food	8-21-07	9-19-07		Settled, \$10 and costs.
Fountain	8549	Louis Vebeker, Covington.	Lard	8-21-07	9-24-07		Settled, \$10 and costs.
Fountain	8545	Ed. Fournier, Attica.	Lard	8-24-07	9-24-07		Settled, \$10 and costs.
Fountain	8803	Out A. Davis, Covington.	Lard	6-24-07	6-24-07		Settled, \$10 and costs.
Fountain	8805	Wm. Dennis, Covington.	Lard	6-25-07	6-25-07		Settled, \$10 and costs.
Fountain	8804	W. S. Bauman, Vicksburg.	Lard	6-25-07	6-25-07		Settled, \$10 and costs.
Fountain	7600	A. J. Street, Marion.	Hamburger steak	6-26-07	6-26-07		Settled, \$10 and costs.
Grant	7605	Fred & Mason, Marion.	Lard	6-5-07	6-28-07	Appealed	Fined, \$10 and costs.
Grant	7603	Lever Bros., Marion.	Lard	6-5-07	6-28-07	Not guilty	
Grant	7597	Cold Storage Ice Cream Co., Marion.	Lard	6-5-07	6-28-07	Not guilty	
Grant	7611	C. H. Overman, Marion.	Lard	6-5-07	6-28-07		Settled, \$10 and costs.
Grant	7598	George Kiefer, Marion.	Lard	6-5-07	6-28-07		Settled, \$10 and costs.
Grant	8358	Chris C. Gordon, Marion.	Sausage	6-21-07	6-28-07		Settled, \$10 and costs.
Grant	8372	Jake Middleton, Marion.	Milk	6-21-07	6-28-07	Not guilty	
Grant	8374	George A. Phillips, Marion.	Milk	6-21-07	6-28-07	Not guilty	
Grant	8370	Dick's Restaurant and Bakery, Marion.	Milk	6-21-07	6-28-07	Not guilty	
Grant	9309	J. F. King, Jassenville.	Orange cider	8-2-07	8-2-07		Settled, \$10 and costs.
Greene	9311	F. S. Benjamin, Linton.	Dirty milk	6-30-07	7-31-07		Settled, \$10 and costs.
Greene	9301	Wm. Ritter, Bloomfield.	Lard	10-23-07	10-23-07		Settled, \$10 and costs.
Greene	7133	Verl K. Osborn, Plainfield.	Iodine	6-4-07	6-18-07		Settled, \$10 and costs.
Hendricks	7180	Edward D. Crowley, Danville.	Milk	4-8-07	6-12-07		Settled, \$10 and costs.
Henry	7345	Mansfield & Shields, New Castle.	Meat	10-17-07	10-17-07		Settled, \$10 and costs.
Howard	7350	Williams Bros., Kokomo.	Cider vinegar	4-22-07			Settled, \$10 and costs.
Howard	7350	W. J. Webb, Kokomo.	Lard	4-22-07			Settled, \$10 and costs.
Howard	7142	Union Dairy Company, Kokomo.	Milk	4-6-07			Settled, \$10 and costs.

Jackson.....	7562	Louis Helms, Seymour.....	Hamburger steak.....	5- 3-07	5- 4-07	Settled, \$10 and costs.
Jackson.....		Alex. Lee, Seymour.....	Unsanitary conditions.....	9-25-07	9-25-07	Settled, \$10 and costs.
Jefferson.....	8649	Albert Ruediger, Madison.....	Unsanitary conditions.....	9-25-07	9-25-07	Settled, \$10 and costs.
Jefferson.....	8655	Stephen F. McKay, Madison.....	Milk.....	7-13-07	7-19-07	Settled, \$10 and costs.
Jefferson.....	8656	Ed. W. Swauger, Madison.....	Milk.....	7-13-07	7-19-07	Settled, \$10 and costs.
Jefferson.....	8657	Henry Eckert, Madison.....	Milk.....	7-13-07	7-19-07	Settled, \$10 and costs.
Johnson.....	8879	Caleb M. Eaton, Franklin.....	Milk.....	7-13-07	7-19-07	Settled, \$10 and costs.
Lake.....		M. W. Lutz, Hammond.....	Cider vinegar.....	8- 3-07	9-16-07	Settled, \$10 and costs.
Lake.....		T. B. Roger, Hobart.....	Unsanitary conditions.....	7-12-07	7-12-07	Settled, \$10 and costs.
Lake.....		W. Dobbins, Hammond.....	Unsanitary conditions.....	7-12-07	7-12-07	Settled, \$10 and costs.
Lake.....		Sam Gobitz, Hammond.....	Unsanitary conditions.....	7-12-07	7-12-07	Settled, \$10 and costs.
Lake.....		E. J. Nicholson, Ross Station.....	Unsanitary conditions.....	7-12-07	7-12-07	Settled, \$10 and costs.
Madison.....	8022	Daniel Kuris, Alexandria.....	Lard.....	6- 4-07	6-15-07	Settled, \$10 and costs.
Madison.....	8175	Fred Alderdorf, Elwood.....	Hamburger.....	6- 4-07	6-10-07	Settled, \$10 and costs.
Madison.....	8531	Weichner & Arend, Elwood.....	Lard.....	5-23-07	6-12-07	Settled, \$10 and costs.
Madison.....	8026	Bernard H. Keller, Elwood.....	Sausage.....	6-22-07	6-22-07	Settled, \$10 and costs.
Marion.....	7813	John P. Downs, Alexandria.....	Butter.....	6- 1-07	8-31-07	Settled, \$10 and costs.
Marion.....	7832	Merchants Restaurant, Indianapolis.....	Butter.....	6-12-07	8- 1-07	Settled, \$10 and costs.
Marion.....	7839	Foster-Fowler Restaurant, Indianapolis.....	Butter.....	6-12-07	8- 2-07	Settled, \$10 and costs.
Marion.....	8194	Born's Restaurant, Indianapolis.....	Butter.....	4- 4-07	4-24-07	Settled, \$10 and costs.
Marion.....	7002	Mont. Williams, Indianapolis.....	Butter.....	4- 4-07	4-24-07	Settled, \$10 and costs.
Marion.....	7988	Wm. H. Eller, Indianapolis.....	Butter.....	4- 4-07	4-24-07	Settled, \$10 and costs.
Marion.....	7108	Chas. Ralleback, Indianapolis.....	Butter.....	4- 4-07	4-24-07	Settled, \$10 and costs.
Marion.....	6979	Mary E. Doolittle, Indianapolis.....	Butter.....	4- 4-07	5- 1-07	Settled, \$10 and costs.
Marion.....	6985	N. B. Groff, Indianapolis.....	Butter.....	4- 4-07	5- 1-07	Settled, \$10 and costs.
Marion.....	6986	Frank Gross, Indianapolis.....	Maple sugar.....	4- 4-07	5- 1-07	Settled, \$10 and costs.
Marion.....	7254	Chas. H. Rinne, Indianapolis.....	Maple sugar.....	4- 4-07	5- 1-07	Settled, \$10 and costs.
Marion.....	7085	Frank M. White, Indianapolis.....	Maple sugar.....	4- 4-07	5- 1-07	Settled, \$10 and costs.
Marion.....	7088	Daniel C. Buser, Indianapolis.....	Maple sugar.....	4-22-07	5-10-07	Settled, \$10 and costs.
Marion.....	7248	Eliz. M. Berry, Indianapolis.....	Maple sugar.....	4- 4-07	5- 1-07	Settled, \$10 and costs.
Marion.....	7239	Henry Glick & David Shane, Indianapolis.....	Maple sugar.....	4- 4-07	5- 1-07	Settled, \$10 and costs.
Marion.....	7540	Wm. H. Burgess, Indianapolis.....	Black pepper.....	4-22-07	5- 1-07	Settled, \$10 and costs.
Marion.....	7589	C. W. Verharg, Indianapolis.....	Po. cinnamon.....	5-15-07	5-22-07	Settled, \$10 and costs.
Marion.....	7595	J. P. Jagers, Indianapolis.....	Lime water.....	5-15-07	5-22-07	Settled, \$10 and costs.
Marion.....	7422	F. P. Jagers, Indianapolis.....	Lard.....	5-15-07	5-22-07	Settled, \$10 and costs.
Marion.....	7423	Andrew Mass, Indianapolis.....	Lard.....	5-15-07	5-22-07	Settled, \$10 and costs.
Marion.....	7592	Chas. H. Cook, Indianapolis.....	Lard.....	5-15-07	5-22-07	Settled, \$10 and costs.
Marion.....	7669	Jno. Brenner, Indianapolis.....	Lard.....	5-15-07	5-22-07	Settled, \$10 and costs.
Marion.....	7594	Schneider Sisters, Indianapolis.....	Lard.....	5-15-07	5-22-07	Settled, \$10 and costs.
Marion.....	7626	Standard Grocery Co., Indianapolis.....	Lard.....	5-15-07	5-22-07	Settled, \$10 and costs.
Marion.....	7587	Fred Jans, Indianapolis.....	Lard.....	5-15-07	5-22-07	Settled, \$10 and costs.
Marion.....	7588	C. Zable, Indianapolis.....	Lard.....	5-15-07	5-22-07	Settled, \$10 and costs.
Marion.....	7586	Chas. Morbeck, Indianapolis.....	Butter.....	5-15-07	5-22-07	Settled, \$10 and costs.
Marion.....	8183	Miles Restaurant, Indianapolis.....	Butter.....	6-12-07	7- 9-07	Settled, \$10 and costs.
Marion.....	7831	Horace Haynes, Indianapolis.....	Butter.....	6-12-07	7- 9-07	Settled, \$10 and costs.
Marion.....	7770	Little Denison, Indianapolis.....	Butter.....	6-12-07	7- 9-07	Settled, \$10 and costs.
Marion.....	8195	Bond's Restaurant, Indianapolis.....	Butter.....	6-12-07	7- 9-07	Settled, \$10 and costs.
Marion.....		"Abe Martin" Restaurant, Indianapolis.....	Butter.....	6-12-07	7- 9-07	Settled, \$10 and costs.

Appealed Cir. Court.

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LIST OF PROSECUTIONS BROUGHT UNDER THE NEW FOOD AND DRUG LAW FROM APRIL 1 TO OCTOBER 31—Continued.

County.	Lab No.	Name and Address of Defendant.	Illegal Sale of.	Information Filed.	Date of Trial.	Disposition of Case.	
						By the Court.	Final.
Floyd	9385	John Stull, New Albany.	Cider vinegar	9-16-07	9-17-07		Settled, \$10 and costs.
Floyd	9386	John Stull, New Albany.	Lard	9-16-07	9-17-07		Settled, \$10 and costs.
Floyd	9387	Benj. Jackson, New Albany.	Cider vinegar	9-16-07	9-17-07	Appeal taken	Settled, \$10 and costs.
Floyd	9388	Benj. Jackson, New Albany.	Lard	9-16-07	9-17-07	Appeal taken	Settled, \$10 and costs.
Floyd	9402	Wm. Stonecipher, New Albany.	Cider vinegar	9-16-07	9-17-07		Settled, \$10 and costs.
Fountain	8544	Fred Springman, Attica.	Lard	8-21-07	8-6-07		Settled, \$10 and costs.
Fountain	8545	Dan V. Smith & Co., Attica.	Lard	8-21-07	8-6-07		Settled, \$10 and costs.
Fountain	8610	Merriman Bros., Covington.	Orangeade.	8-21-07	8-10-07		Settled, \$10 and costs.
Fountain	8601	Frank Coleman, Covington.	Exposed food.	8-19-07	8-10-07		Settled, \$10 and costs.
Fountain	8604	Frank Coleman, Covington.	Lard	8-19-07	8-31-07		Settled, \$10 and costs.
Fountain	8649	Zimmerman & Son, Covington.	Lard	8-24-07	8-31-07		Settled, \$10 and costs.
Fountain	8645	Geo. Fourtessen, Attica.	Lard	8-24-07	8-31-07		Settled, \$10 and costs.
Fountain	8603	Ed. Foster, Attica.	Lard	8-24-07	8-31-07		Settled, \$10 and costs.
Fountain	8805	Oat A. Davis, Covington.	Lard	8-25-07	8-31-07		Settled, \$10 and costs.
Fountain	8805	Wm. Dennis, Covington.	Lard	8-25-07	8-31-07		Settled, \$10 and costs.
Fountain	8904	W. S. Bannon, Veederburg.	Lard	8-25-07	8-31-07		Settled, \$10 and costs.
Fountain	8904	A. J. Street, Marion.	Lard	8-25-07	8-31-07		Settled, \$10 and costs.
Grant	7600	Freel & Mason, Marion.	Hamburger steak.	8-5-07	8-28-07	Appealed	Settled, \$10 and costs.
Grant	7603	Levey Bros., Marion.	Lard	8-5-07	8-28-07	Not guilty.	Settled, \$10 and costs.
Grant	7597	Cold Storage Ice Cream Co., Marion.	Lard	8-5-07	8-28-07	Not guilty.	Settled, \$10 and costs.
Grant	7611	C. H. Overman, Marion.	Lard	8-5-07	8-28-07		Settled, \$10 and costs.
Grant	7588	George Koller, Marion.	Lard	8-5-07	8-28-07		Settled, \$10 and costs.
Grant	8358	Chris. C. Gordon, Marion.	Sausage.	8-21-07	8-28-07		Settled, \$10 and costs.
Grant	8372	Jake Middleton, Marion.	Milk	8-21-07	8-28-07	Not guilty.	Settled, \$10 and costs.
Grant	8374	George A. Phillips, Marion.	Milk	8-21-07	8-28-07	Not guilty.	Settled, \$10 and costs.
Grant	8370	Dick's Restaurant and Bakery, Marion.	Milk	8-21-07	8-28-07	Not guilty.	Settled, \$10 and costs.
Greene	9309	J. F. King, Jasonville.	Orange cider.	8-2-07	8-2-07		Settled, \$10 and costs.
Greene	9311	E. S. Benjamin, Linton.	Lard	8-2-07	8-2-07		Settled, \$10 and costs.
Greene	9301	Wm. Ritter, Bloomfield.	Dirty milk.	10-23-07	7-31-07		Settled, \$10 and costs.
Hendricks	7133	Verl K. Osborn, Plainfield.	Lard	10-23-07	10-23-07		Settled, \$10 and costs.
Hendricks	7180	Edward D. Crowley, Danville.	Iodine.	4-4-07	6-12-07		Settled, \$10 and costs.
Henry	7345	Manfield & Shields, New Castle.	Milk	4-4-07	6-12-07		Settled, \$10 and costs.
Howard	7345	Williams Bros., Kokomo.	Meat.	10-17-07	10-17-07		Settled, \$10 and costs.
Howard	7350	W. J. Webb, Kokomo.	Cider vinegar	4-22-07	10-17-07		Settled, \$10 and costs.
Howard	7142	Union Dairy Company, Kokomo.	Lard	4-22-07	4-6-07		Settled, \$10 and costs.
Howard	7142	Union Dairy Company, Kokomo.	Milk	4-22-07	4-6-07		Settled, \$10 and costs.

Jackson.....	7562	Louis Helms, Seymour.....	Hamburger steak.....	5- 3-07	5- 4-07	Settled, \$10 and costs.
Jackson.....		Max Lee, Seymour.....	Unsatisfactory conditions.....	9-25-07	9-25-07	Settled, \$10 and costs.
Jefferson.....	8649	James Russell, Seymour.....	Unsatisfactory conditions.....	9-25-07	9-25-07	Settled, \$10 and costs.
Jefferson.....	8655	Albert Ruediger, Madison.....	Milk.....	7-13-07	7-19-07	Settled, \$10 and costs.
Jefferson.....	8656	Stephen F. McKay, Madison.....	Milk.....	7-13-07	7-19-07	Settled, \$10 and costs.
Jefferson.....	8657	Ed W. Strangler, Madison.....	Milk.....	7-13-07	7-19-07	Settled, \$10 and costs.
Johnson.....	8679	Henry Eckert, Madison.....	Milk.....	7-13-07	7-19-07	Settled, \$10 and costs.
Lake.....		Caleb M. Eaton, Franklin.....	Cider vinegar.....	8- 3-07	9-16-07	Settled, \$10 and costs.
Lake.....		M. W. Lutz, Hammond.....	Unsatisfactory conditions.....	7-12-07	7-12-07	Settled, \$10 and costs.
Lake.....		T. B. Roper, Hobart.....	Unsatisfactory conditions.....	7-12-07	7-12-07	Settled, \$10 and costs.
Lake.....		W. Dobbins, Hammond.....	Unsatisfactory conditions.....	7-12-07	7-12-07	Settled, \$10 and costs.
Lake.....		Sam Gobitz, Hammond.....	Unsatisfactory conditions.....	7-12-07	7-12-07	Settled, \$10 and costs.
Lake.....		E. J. Nicholson, Ross Station.....	Unsatisfactory conditions.....	7-12-07	7-12-07	Settled, \$10 and costs.
Madison.....	8022	Daniel Kurtz, Alexandria.....	Lard.....	6- 4-07	6-15-07	Settled, \$10 and costs.
Madison.....	8175	Fred Altendorf, Elwood.....	Lard.....	6- 4-07	6-10-07	Settled, \$10 and costs.
Madison.....	7389	Weichner & Arend, Elwood.....	Lard.....	5-23-07	6-12-07	Settled, \$10 and costs.
Madison.....	8531	John P. Downs, Alexandria.....	Sausage.....	6-22-07	6-22-07	Settled, \$10 and costs.
Madison.....	8026	Merchants Restaurant, Indianapolis.....	Butter.....	6- 1-07	8-31-07	Settled, \$10 and costs.
Marion.....	7832	Foster-Fowler Restaurant, Indianapolis.....	Butter.....	6- 1-07	8- 1-07	Settled, \$10 and costs.
Marion.....	7839	Bern's Restaurant, Indianapolis.....	Butter.....	6-12-07	8- 2-07	Settled, \$10 and costs.
Marion.....	8194	Bern's Restaurant, Indianapolis.....	Butter.....	6-12-07	8- 2-07	Settled, \$10 and costs.
Marion.....	7002	Mont. Williams, Indianapolis.....	Butter.....	4- 4-07	4-24-07	Settled, \$10 and costs.
Marion.....	7004	Wm. H. Elker, Indianapolis.....	Butter.....	4- 4-07	4-24-07	Settled, \$10 and costs.
Marion.....	7988	Chas. Ralbach, Indianapolis.....	Butter.....	4- 4-07	4-24-07	Settled, \$10 and costs.
Marion.....	7003	Mary E. Doolittle, Indianapolis.....	Butter.....	4- 4-07	5- 1-07	Settled, \$10 and costs.
Marion.....	6979	N. B. Groff, Indianapolis.....	Butter.....	4- 4-07	5- 1-07	Settled, \$10 and costs.
Marion.....	6985	Frank Gross, Indianapolis.....	Maple sugar.....	4- 4-07	5- 1-07	Settled, \$10 and costs.
Marion.....	6986	Chas. H. Runne, Indianapolis.....	Maple sugar.....	4- 4-07	5- 1-07	Settled, \$10 and costs.
Marion.....	7254	Frank M. White, Indianapolis.....	Maple sugar.....	4- 4-07	5- 1-07	Settled, \$10 and costs.
Marion.....	7085	Daniel C. Buser, Indianapolis.....	Maple sugar.....	4-22-07	5-10-07	Settled, \$10 and costs.
Marion.....	7008	Eliza M. Berry, Indianapolis.....	Maple sugar.....	4- 4-07	5- 1-07	Settled, \$10 and costs.
Marion.....	7248	Henry Glick & David Shane, Indianapolis.....	Maple sugar.....	4- 4-07	5- 1-07	Settled, \$10 and costs.
Marion.....	7540	Wm. H. Burgess, Indianapolis.....	Black pepper.....	4-22-07	5- 1-07	Settled, \$10 and costs.
Marion.....	7589	C. W. Verberg, Indianapolis.....	Po. cinnamon.....	5-15-07	5-22-07	Settled, \$10 and costs.
Marion.....	7595	J. P. Jagers, Indianapolis.....	Line water.....	5-15-07	5-22-07	Settled, \$10 and costs.
Marion.....	7589	F. P. Jagers, Indianapolis.....	Lard.....	5-15-07	5-22-07	Settled, \$10 and costs.
Marion.....	7422	Andrew Mass, Indianapolis.....	Lard.....	5-15-07	5-22-07	Settled, \$10 and costs.
Marion.....	7423	Chas. H. Cook, Indianapolis.....	Lard.....	5-15-07	5-22-07	Settled, \$10 and costs.
Marion.....	7592	Jno. Brenner, Indianapolis.....	Lard.....	5-15-07	5-22-07	Settled, \$10 and costs.
Marion.....	7594	Schneider Sisters, Indianapolis.....	Lard.....	5-15-07	5-22-07	Settled, \$10 and costs.
Marion.....	7594	Standard Grocery Co., Indianapolis.....	Lard.....	5-15-07	5-22-07	Settled, \$10 and costs.
Marion.....	7594	Fred Jans, Indianapolis.....	Lard.....	5-15-07	5-22-07	Settled, \$10 and costs.
Marion.....	7594	Chas. Morbach, Indianapolis.....	Lard.....	5-15-07	5-22-07	Settled, \$10 and costs.
Marion.....	7594	Miles Restaurant, Indianapolis.....	Butter.....	5-15-07	5-22-07	Settled, \$10 and costs.
Marion.....	7836	Horace Haynes, Indianapolis.....	Butter.....	6-12-07	7- 9-07	Settled, \$10 and costs.
Marion.....	8183	Little Denison, Indianapolis.....	Butter.....	6-12-07	7- 9-07	Settled, \$10 and costs.
Marion.....	7831	Bond's Restaurant, Indianapolis.....	Butter.....	6-12-07	7- 9-07	Settled, \$10 and costs.
Marion.....	7770	"Abe Martin" Restaurant, Indianapolis.....	Butter.....	6-12-07	7- 9-07	Settled, \$10 and costs.
Marion.....	8195			6-12-07	7- 9-07	Settled, \$10 and costs.

Appealed Cr. Court.

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LIST OF PROSECUTIONS BROUGHT UNDER THE NEW FOOD AND DRUG LAW FROM APRIL 1 TO OCTOBER 31—Continued.

County.	Lab. No.	Name and Address of Defendant.	Illegal Sale of.	Information Filed.	Date of Trial.	Disposition of Case.	
						By the Court.	Final.
Marion.....	8184	The Oak, Rhodes & Coen, Indianapolis.....	Butter.....	6-12-07	7- 9-07		Settled, \$10 and costs.
Marion.....	8193	National Restaurant, Indianapolis.....	Butter.....	7- 3-07	7- 3-07		Settled, \$10 and costs.
Marion.....	8190	Norman Restaurant, Indianapolis.....	Butter.....	6-12-07	7- 9-07		Settled, \$10 and costs.
Marion.....	7841	Edward H. Thayer, Indianapolis.....	Butter.....	6-12-07	7- 9-07		Settled, \$10 and costs.
Marion.....	7837	Smith's Restaurant, Indianapolis.....	Butter.....	6-12-07	7- 9-07		Settled, \$10 and costs.
Marion.....	8191	Princeton Restaurant, Indianapolis.....	Butter.....	6-12-07	7- 9-07	Dismissed by judge.	Settled, \$10 and costs.
Marion.....	7844	Ross's Cafe, Indianapolis.....	Butter.....	6-12-07	7- 9-07	Dismissed by judge.	Settled, \$10 and costs.
Marion.....	7834	Schiffman Coffee House, Indianapolis.....	Butter.....	6-12-07	7- 9-07	Dismissed by judge.	Settled, \$10 and costs.
Marion.....	7829	Illinois Cafe, Indianapolis.....	Butter.....	6-12-07	7- 9-07	Dismissed by judge.	Settled, \$10 and costs.
Marion.....	8192	B. M. Covert, Indianapolis.....	Butter.....	6-12-07	7- 9-07	Dismissed by judge.	Settled, \$10 and costs.
Marion.....	7887	Charles Morback, Indianapolis.....	Lard.....	6-12-07	7- 9-07		Settled, \$10 and costs.
Marion.....	8254	Katherine Wallace, Indianapolis.....	Milk.....	6-12-07	7- 9-07		Settled, \$10 and costs.
Marion.....	8158	B. T. Fisher, Indianapolis.....	Line water.....	6- 3-07	7- 9-07		Settled, \$10 and costs.
Miami.....		Frank Jackson, Peru.....	Unsanitary milk rooms.....	10-31-07	10-31-07		Settled, \$10 and costs.
Monroe.....	7892	William Curry, Bloomington.....	Milk.....	6- 6-07			Settled, \$10 and costs.
Monroe.....	7903	William M. Wieman, Bloomington.....	Milk.....	6- 6-07			Settled, \$10 and costs.
Montgomery.....	8288	T. E. Well & Co., Crawfordsville.....	Lard.....	8- 3-07	8-29-07		Settled, \$10 and costs.
Montgomery.....	8333	Phillip Pink & Son, Crawfordsville.....	Lard.....	8- 3-07	8-29-07		Settled, \$10 and costs.
Montgomery.....	8285	Musie Hall Pharmacy, Crawfordsville.....	Lard.....	8- 3-07	8-29-07		Settled, \$10 and costs.
Montgomery.....	8282	Snaker & Gilkey, Crawfordsville.....	Lard.....	8-29-07	8-29-07		Settled, \$10 and costs.
Montgomery.....		Edgar W. Pease, Crawfordsville.....	Orangeade.....	8-29-07	8-29-07		Settled, \$10 and costs.
Montgomery.....		Thomas Darrab, Crawfordsville.....	Camphor.....	8- 3-07	8- 9-07		Settled, \$10 and costs.
Montgomery.....	8719	O. W. Stephenson, Orleans.....	Sausage.....	8-13-07	8-17-07		Settled, \$10 and costs.
Posey.....	8451	Carl Stutz, Mt. Vernon.....	Milk.....	8-23-07	8-24-07		Settled, \$10 and costs.
Putnam.....	9764	Jesse McAnally, Greencastle.....	Unsanitary conditions.....	8-21-07	8-21-07		Settled, \$10 and costs.
Putnam.....		Wm. Haepill, Greencastle.....	Allepice.....	4-22-07	5-17-07	Not guilty	Settled, \$38; 2 charges.
Putnam.....	7267	O. L. Means, Shelbyville.....	Vinegar.....	4-22-07	5-17-07	Not guilty	Settled, \$10 and costs.
Shelby.....	7264	S. C. Goff, Shelbyville.....	Milk.....	4-22-07	5-17-07	Not guilty	Settled, \$10 and costs.
Shelby.....	7258	Ernest James, Shelbyville.....	Milk.....	4-22-07	5-17-07	Not guilty	Settled, \$10 and costs.
Shelby.....	7255	Howard Leep, Shelbyville.....	Milk.....	4-22-07	5-17-07	Not guilty	Settled, \$10 and costs.
Shelby.....	7256	Lon Coulston, Shelbyville.....	Milk.....	4-22-07	5-17-07	Not guilty	Settled, \$10 and costs.
Sullivan.....		Wm. Johnson, Farmersburg.....	Unsanitary conditions.....	8-14-07	8-14-07		Settled, \$38; 2 charges.
Sullivan.....	9316	Phillip Coyle, Farmersburg.....	Orangeade powder.....	8- 8-07	8- 8-07		Settled, \$10 and costs.
Sullivan.....	8317	Jae. F. Yeager, Farmersburg.....	Orangeade powder.....	8- 8-07	8- 8-07		Settled, \$10 and costs.
Sullivan.....	8315	A. F. Edwards, Farmersburg.....	Orangeade powder.....	8- 8-07	8- 8-07		Settled, \$10 and costs.
Sullivan.....		Wesley Barnard, Sullivan.....	Dirty milk.....	8-14-07	8-14-07		Settled, \$10 and costs.
Sullivan.....		W. R. Turnan, Sullivan.....	Colored distilled vinegar.....	8-16-07	8-16-07		Settled, \$10 and costs.

Sullivan.....	Geo. W. Leach, Sullivan.....	Unsanitary conditions.....	8-13-07	8-13-07	Settled, \$50.25; 3 charges.
Sullivan.....	Walter H. Leach, Sullivan.....	Colored distilled vinegar.....	8-14-07	8-14-07	Settled, \$10 and costs.
Sullivan.....	H. Leonard, Sullivan.....	Unsanitary conditions.....	8-13-07	8-13-07	Settled, \$10 and costs.
Sullivan.....	Fred Harding, Dugger.....	Orange cider.....	10-22-07	10-22-07	Settled, \$10 and costs.
Sullivan.....	Frank T.....	Maple syrup.....	8-14-07	10-22-07	Settled, \$10 and costs.
Sullivan.....	Reed & Bailey, Sullivan.....	Spirits camphor.....	8-15-07	10-22-07	Settled, \$10 and costs.
Tippecanoe.....	Lorenson Nixey, Dayton.....	Cream tartar.....	6-7-07	10-5-07	Settled, \$10 and costs.
Tippecanoe.....	Dreyfus & Co., Lafayette.....	Lard.....	8-21-07	10-4-07	Settled, \$10 and costs.
Tippecanoe.....	Samuel N. Jackson, Lafayette.....	Milk.....	10-9-07	10-9-07	Settled, \$10 and costs.
Tippecanoe.....	Nicholas Gillian, Lafayette.....	Milk.....	10-1-07	10-2-07	Settled, \$10 and costs.
Tippecanoe.....	Nicholas S. Raders, Lafayette.....	Dirty milk.....	10-10-07	10-4-07	Settled, \$10 and costs.
Tippecanoe.....	Joseph Van Dams, Lafayette.....	Dirty milk.....	10-10-07	10-10-07	Settled, \$10 and costs.
Tippecanoe.....	John Stell, Lafayette.....	Milk.....	10-30-07	10-31-07	Settled, \$10 and costs.
Tippecanoe.....	James Lucas, W. Lafayette.....	Pasty exposed.....	10-2-07	10-2-07	Settled, \$10 and costs.
Tippecanoe.....	Nicholas Gillian, Lafayette.....	Meat.....	10-8-07	10-8-07	Settled, \$10 and costs.
Tippecanoe.....	Wm. E. Burkle, Lafayette.....	Extract raspberry.....	5-11-07	9-28-07	Settled, \$10 and costs.
Tippecanoe.....	C. T. Hurley, Lafayette.....	Sausage.....	6-21-07	6-21-07	Settled, \$10 and costs.
Tippecanoe.....	Bunch & Bunch, Tipton.....	Sausage.....	6-21-07	6-21-07	Settled, \$10 and costs.
Tippecanoe.....	Moore & Surface, Tipton.....	Sausage.....	6-21-07	6-21-07	Settled, \$10 and costs.
Tippecanoe.....	Batchelor & May, Tipton.....	Sausage.....	6-21-07	6-21-07	Settled, \$10 and costs.
Tippecanoe.....	C. B. Hobbs, Tipton.....	Polopna.....	6-21-07	6-21-07	Settled, \$10 and costs.
Tippecanoe.....	The Beeler Co., Tipton.....	Lard.....	6-21-07	6-21-07	Settled, \$10 and costs.
Vanderburgh.....	Oscar Born, Evansville.....	Vinegar.....	4-22-07	9-24-07	Quashed.
Vanderburgh.....	Ed. Waldsmith, Evansville.....	Butter.....	6-7-07	6-18-07	Quashed.
Vanderburgh.....	Jacob Foltz, Jr., Evansville.....	Hamburger.....	6-7-07	6-18-07	Discharged by judge.
Vanderburgh.....	Louis Schmaddal, Evansville.....	Hamburger.....	6-7-07	7-8-07	Discharged by judge.
Vanderburgh.....	Samuel G. Newman, Evansville.....	Lard.....	6-7-07	7-8-07	Discharged by judge.
Vanderburgh.....	Vickery Bros., Evansville.....	Lard.....	6-7-07	7-8-06	Discharged by judge.
Vanderburgh.....	Nick Nauzopolis.....	Unsanitary conditions.....	5-12-07	5-22-07	Discharged.
Vanderburgh.....	Gus Well, Evansville.....	Sausage.....	6-7-07	7-8-07	Discharged.
Vermillion.....	Oscar Chesterfield, Clinton.....	Orange cider.....	9-9-07	9-9-07	Settled, \$10 and costs.
Vigo.....	Deis & Shinn, Clinton.....	Meat.....	9-5-07	9-9-07	Settled, \$10 and costs.
Vigo.....	George Wood, Terre Haute.....	Lard.....	8-21-07	8-27-07	Settled, \$10 and costs.
Vigo.....	C. O. Boyd, Terre Haute.....	Lard.....	8-21-07	8-27-07	Settled, \$10 and costs.
Vigo.....	John F. Cause, Terre Haute.....	Lard.....	8-21-07	8-27-07	Settled, \$10 and costs.
Vigo.....	C. W. Nash, Terre Haute.....	Lard.....	8-21-07	8-27-07	Settled, \$10 and costs.
Vigo.....	Boss Mack, Terre Haute.....	Milk.....	7-13-07	7-13-07	Settled, \$32; 2 charges.
Vigo.....	George C. Bosler, Terre Haute.....	Lard.....	7-8-07	7-8-07	Settled, \$10 and costs.
Vigo.....	Charles E. Ehrmann & Co., Terre Haute.....	Lard.....	7-3-07	7-3-07	Settled, \$10 and costs.
Vigo.....	Presmont E. Jacques & Son, Terre Haute.....	Lard.....	7-8-07	7-8-07	Settled, \$10 and costs.
Vigo.....	Fred Herman, Terre Haute.....	Lard.....	7-2-07	7-2-07	Settled, \$10 and costs.
Vigo.....	Ed. A. Hollingsworth, Terre Haute.....	Lard.....	7-16-07	7-16-07	Settled, \$10 and costs.
Vigo.....	James W. Rudolph, Terre Haute.....	Lard.....	7-6-07	7-6-07	Settled, \$10 and costs.
Vigo.....	Charles A. Reaser, Terre Haute.....	Lard.....	7-1-07	7-1-07	Settled, \$10 and costs.
Vigo.....	Patrick Sullivan, Terre Haute.....	Lard.....	7-5-07	7-5-07	Settled, \$10 and costs.
Vigo.....	George Sheldel, Terre Haute.....	Lard.....	7-5-07	7-5-07	Settled, \$10 and costs.
Vigo.....	Leonard Van Prooyen, Terre Haute.....	Lard.....	7-6-07	7-6-07	Settled, \$10 and costs.
Vigo.....	Buntin Drug Co., Terre Haute.....	Ice cream.....	7-18-07	7-18-07	Settled, \$10 and costs.
Vigo.....	Furnas Ice Cream Co., Terre Haute.....	Ice cream.....	7-16-07	7-16-07	Settled, \$10 and costs.

LIST OF PROSECUTIONS BROUGHT UNDER THE NEW FOOD AND DRUG LAW FROM APRIL 1 TO OCTOBER 31—Continued.

County.	Lab No.	Name and Address of Defendant.	Illegal Sale of.	Information Filed.	Date of Trial.	Disposition of Case.	
						By the Court.	Final.
V400.....	8778	Greek Candy Kitchen, Terre Haute.	Ice cream.	7-16-07	7-16-07	.....	Settled, \$10 and costs.
V400.....	8785	Gust Lerkes, Terre Haute.	Ice cream.	7-16-07	7-16-07	.....	Settled, \$10 and costs.
V400.....	8984	Vigo Ice Cream Co., Terre Haute.	Ice cream.	7-16-07	7-16-07	.....	Settled, \$10 and costs.
V400.....	8781	Vigo Confection Co., Terre Haute.	Ice cream.	7-16-07	7-16-07	.....	Settled, \$10 and costs.
V400.....	8779	Vigor & Riggs, Terre Haute.	Ice cream.	7-16-07	7-16-07	.....	Settled, \$10 and costs.
V400.....	8987	A. M. Bagan, Terre Haute.	Sodas.	7-9-07	7-9-07	.....	Settled, \$10 and costs.
V400.....	8781	Garman & Co., Terre Haute.	Link sausage.	7-3-07	7-3-07	.....	Settled, \$10 and costs.
V400.....	8786	Beard Shedd, Terre Haute.	Sausage.	7-3-07	7-3-07	.....	Settled, \$10 and costs.
V400.....	9011	W. L. M. Park, Terre Haute.	Milk.	7-13-07	7-13-07	.....	Settled, \$10 and costs.
V400.....	9021	Loyd Clark, Terre Haute.	Milk.	7-18-07	7-18-07	.....	Settled, \$10 and costs.
V400.....	8968	Carl Klauser, Terre Haute.	Pies exposed.	7-18-07	7-18-07	.....	Settled, \$10 and costs.
V400.....	8968	Dan Holland, Terre Haute.	Milk.	7-24-07	7-24-07	.....	Settled, \$10 and costs.
V400.....	8623	A. W. Harper, Williamsport.	Milk.	7-17-07	7-17-07	.....	Settled, \$10 and costs.
Warren.....			Lard.	8-21-07	9-11-07	.....	Settled, \$10 and costs.

*Meat uncovered in transportation.

REPORT OF SANITARY INSPECTIONS.

The question of food control has always been considered an economic one; where the consumer has been defrauded in the purchase of his provisions, and where the health has been endangered by reason of the use of injurious adulterants. Under the new conditions created by rigid food laws, adulteration by the use of inferior substitutes, injurious colors and preservatives, and all the other illegalities which have been foisted upon the consumer for years, becomes for the most part a thing of the past, and food control takes on a new phase, that of rigid sanitary supervision of the manufacture and distribution of food products. This work, which has been largely neglected in the past because of the apparent necessity for preventing gross fraud, has now become the chief duty of the food inspectors.

The food laws insist upon correct labeling, prohibit substitution and reduction of quality, establish standards of purity and define all forms of adulteration. The new Federal Meat Inspection Law provides for the examination of all meats that enter interstate commerce, establishes sanitary conditions for slaughterhouses, prohibits the use of preservatives and chemicals and takes every precaution to insure the sale of sound and wholesome meat in interstate trade. And yet, while the meat supply of the large cities is necessarily shipped in from the great stockyards, thousands of our people, living in the country and smaller towns and cities, get all their meats from local dealers and butchers who kill and sell their own meats and are not subject to Government inspection. Under the new laws only sound beef can run the gauntlet of half a dozen inspectors and get to market. What becomes of the inferior stock, the lean and crippled beeves? Stock raisers soon learn the folly of sending such grades to the yards where they would only be condemned and discarded, and will place them where there is no inspection, that is, in the local markets. If Federal inspection is needed in the great packing houses, how much more is it needed in every country town and local slaughterhouse.

We are compelling food and drug manufacturers to guarantee the purity of every preparation to their customers. But while we are doing all of these things, while we are teaching honesty and elevating business morals by sheer force of law, we are neglecting almost entirely a most important phase of the food question. While we have been decrying canned meats as poisonous we have paid no attention to sanitary milk production, clean bake shops or whole-

some markets. We forget that meats sterilized by heat can not contain injurious bacteria and that our bread and milk may be swarming with the germs of filth even though they conform to all legal standards of strength and composition. It is well to prohibit the sale of skimmed or watered milk for whole milk, and of colored and preserved milk, because such sale is a fraud. But the vastly more important dairy inspection is not as yet effective except in a few isolated instances where local health officers are awake to the fact that milk is not always fit for consumption simply because it fulfills the requirements of some legislative standard.

The condition of the bakeries that now supply a large proportion of the bread, cake and pastries we eat merits investigation quite as much as do the dairies. The Massachusetts Board of Health took up the work during this last summer, and in a recent report show that of 536 shops inspected but 13, or two per cent., were so clean, well ventilated and lighted as to deserve especial commendation, while the condition of 247, or 47 per cent., was distinctly bad. Bake shops were located in dark, unventilated basements, and the workrooms were the homes of the employees. Here they lived and slept, and made bread for public distribution. The report condemns these shops in these words: "A large proportion of the establishments of this class call for energetic action on the part of the local authorities, and should be closed." What is true of the bakeries of Massachusetts is equally true in Indiana.

In all of our larger cities, especially in those sections where the foreign population lives, much of the food supply as well as the fruit and candies are sold from stalls and push carts in the streets. These stocks of goods are rarely protected from dust and filth and every wind that blows deposits its quota of germ-laden dirt on some article designed as food. The candies and ice creams that tempt the pennies from children's pockets, because of their moist and sticky nature, are the finest of food for bacteria, and should be sold under conditions of cleanliness that can not possibly be obtained in the open street. Food products can not be clean if they are made in dirty shops, displayed in dirty stores, sold by dirty men. They may comply with recognized standards of purity, that is, they may be properly labeled, of full weight, and made from the genuine article, but although they are passed as "inspected" they are not wholesome and should not be sold.

The grocery store or market is the distributing agent of the food manufacturer. It is probable that 95 per cent. of our food passes through the hands of the grocer or meat man. The prosperous

merchant is usually awake to the fact that his business will suffer if his shop is not attractive, and his stock fresh. But in every community there are some dealers whose meat blocks are unclean and covered with flies, whose refrigerators are slimy and foul smelling, whose back rooms are filled with accumulated filth, whose cellars are damp and dirty, whose dried fruit is wormy, whose fruit and vegetables are decayed, and whose cat sleeps in the cracker barrel.

All of these conditions are bad, more inimical to health than food adulteration as usually understood, and yet they are tolerated or ignored because of long familiarity. A good fight has been waged by the consumers against impure food. In their zeal they have even ostracized many good things that should be listed as wholesome and cheap. They have been looking, however, at one side of the question and have neglected the important fact, that foods though chemically pure may be sanitarily unfit to eat.

For these reasons a system of sanitary inspection and control is being developed that will embrace every place where food and drug products are manufactured and distributed. Five food and drug inspectors are now on the laboratory force, and in them is vested the authority necessary to control sanitary conditions and enforce the law with respect to adulteration. In making their inspections they are directed by the rules and regulations laid down in a pamphlet issued by the State Board of Health, Department of Food and Drugs, entitled: "The Pure Food and Drug Laws of the State of Indiana, Together with the Rules of the State Board of Health Establishing Minimum Standards and Defining Specific Adulteration of Food and Drugs."

The inspectors have visited 163 cities and towns, and examined 6,008 business places as to their sanitary condition. Out of 2,026 grocery stores 86 were found to be in an excellent condition, 791 were good, 942 were fair, 179 were poor and 28 were bad. The places reported as being in poor or bad condition were usually unclean or poorly lighted and ventilated. Of the 1,311 meat markets and slaughterhouses inspected, 38 were in excellent condition, 459 good, 620 fair, 130 poor and 64 bad. The meat shops were usually condemned as being poor or bad because of unclean conditions and foul refrigerators, and the slaughterhouses because of old, dilapidated buildings and general uncleanliness. The drug stores, 892 of which were inspected, are on the whole kept in a much better condition than are the grocery stores and meat markets. Seventy-two were in excellent shape, 521 good, 270 fair, 29 poor and none were classed as being

bad. Six hundred and twelve bakeries and candy shops were inspected and 26 found to be in excellent condition, 248 good, 250 fair, 71 were poor and 17 were bad. The bakeshops were usually condemned because of unclean conditions; a few were poorly lighted and badly ventilated. Of the 824 hotels and restaurants examined, 37 were in excellent condition, 278 were good, 334 fair, 148 poor and 27 bad. The unsatisfactory conditions were usually uncleanliness and foul refrigerators. Two hundred and forty-six dairies have been inspected, of which 13 were excellent, 40 good, 107 fair, 47 poor and 39 bad. Decided uncleanliness and lack of proper ventilation and light account for the bad reports.

Five hundred and seventy-eight second inspections have been made, which have shown in most cases a marked improvement in sanitary conditions. The results of the work will become more and more apparent as inspectors grow familiar with their duties and have a better acquaintance with the districts in which they are employed.

The following table gives a summary of the results of inspections from the 1st of April to the 31st of October, 1907:

SUMMARY OF INSPECTIONS.

Inspections.	Number Inspected.	Number Excellent.	Number Good.	Number Fair.	Number Poor.	Number Bad.
Dairies.....	246	13	40	107	47	39
Groceries.....	2,026	88	791	942	179	28
Meat Markets and Slaughter Houses.....	1,311	38	459	620	130	64
Drug Stores.....	892	72	521	270	29	0
Bakeries and Candy Shops.....	612	26	248	250	71	17
Hotels and Restaurants.....	824	37	278	334	148	27
Bottling Works, Breweries, etc.....	32	2	15	15	2	0
Chewing Gum Factories.....	1	0	1	0	0	0
Flour Mills.....	1	1	0	0	0	0
Poultry Houses.....	10	0	1	6	2	1
Butter Packing Houses.....	2	0	0	2	0	0
Ice Cream and Ice Factories.....	13	1	8	4	0	0
Canning Factories.....	29	0	10	14	3	2
Cold Storage.....	2	1	1	0	0	0
Fruit Stands.....	1	0	1	0	0	0
Sorghum Works.....	1	0	1	0	0	0
Packing Houses.....	1	0	0	1	0	0
Creameries and Pasteurizing Stations.....	4	1	1	2	0	0
Number of First Inspections.....	6,008	278	2,376	2,565	611	178
Number of Second Inspections.....	578	25	185	330	37	1
Total number of Inspections.....	6,586	303	2,561	2,895	648	179

Abydel, Orange County: One grocery inspected, found to be in fair condition, although somewhat dirty.

Alexandria, Madison County.—Four groceries were inspected; 3 were found to be in good condition and one was fair. One slaughterhouse was in poor condition, due to the unclean and un-

sanitary premises and the bad shape of the killing floor. Of five meat markets, 3 were good and 2 were fair; 10 pounds of meat were condemned. Four drug stores were inspected and were found to be in good condition. One bakery was in fair condition. Of 5 hotels and restaurants, 3 were good and 2 were fair, the walls, ceilings and refrigerators were unclean.

Amo, Hendricks County: Three groceries were inspected, two of which were in fair condition and one was poor; the shelves, counters and the refrigerator were unclean. One meat market was inspected and was found to be in poor condition, the meat was not of good quality and the meat block was unclean. One drug store was in fair condition only, the goods were not clean and up to date, and the walls, ceiling and back room were not clean. One restaurant was visited and found to be in a poor condition, due to the unclean shelves and tables.

Anderson, Madison County: Seventy-one inspections were made. Of 3 dairies visited, 2 were good and one was fairly clean. Of 23 groceries, 12 were in good condition and 11 were fair. Of 18 meat markets and slaughterhouses, 9 were good and 9 were fair. Two were unclean. In one store 50 pounds of beef were condemned. Of 13 drug stores, 9 were good and 4 were fair. Of 10 bakeries and confectioneries, 3 were good, 6 were fair and one was in a poor condition. As the proprietor is building a new place, this bakery will soon be abandoned. Ten hotels and restaurants were inspected, 6 were found to be in good condition and 4 were fairly clean. The garbage was not removed daily.

Arcadia, Hamilton County: Two groceries inspected, condition good; 2 drug stores, 1 good, 1 fair; 1 bakery, good condition; 2 hotels, condition good.

Atlanta, Hamilton County: Two groceries inspected, condition good; 2 drug stores in good condition; 1 bakery and 2 hotels in good condition.

Attica, Fountain County: Nine groceries were visited; 3 were in good condition and 6 were found to be in fair condition only, due to the unsanitary condition of the refrigerators and walls. Three meat markets were inspected, and were in fair condition. One hundred sixty pounds of meat was condemned. Two drug stores were in good condition. Three bakeries and confectioneries were in a fair and poor condition, owing to the unclean condition. One hotel was in fair condition.

Aurora, Dearborn County: Thirteen groceries were inspected, 4 were good, 5 were fair and 4 were in a poor condition. Seven had

dirty shelves, counters, back shops or unclean dried fruits. Of four meat markets and slaughterhouses, 2 were good, one was fair and one was poor, having open floors and side walls. Ten days' notice was given to screen, whitewash and enclose the slaughterhouse. Three drug stores were in good condition, although the cellars were somewhat dirty. Six bakeries and confectioneries were visited, 3 were found to be in good condition, 2 were fair and 1 was poor. One restaurant was found to be in good shape. One hundred four cans of meat, 352 bottles of extract, 88 cans of baking powder and 15 bottles of catsup were condemned.

Austin, Scott County: Two groceries were visited and were found to be in a poor condition because they were not kept in a sanitary manner. Two canning factories were inspected and were in a fair condition, due to poor drainage.

Avon, Hendricks County: Two groceries were inspected and were found to be in a fair state of cleanliness.

Batesville, Ripley County.—Twenty inspections were made. Of 8 groceries visited, 5 were good, 2 were fair and 1 was poor on account of the general uncleanly conditions. Thirty-two cans of spices, 120 bottles of extract, 31 bottles of catsup and 332 cans of baking powder were condemned. Of 3 meat markets and slaughterhouses, 2 were good and 1 was poor. Ten days' notice was given to put slaughterhouse in a sanitary condition. Of 3 drug stores, 2 were good and 1 was fair. Three bakeries and confectioneries were inspected and were found to be in a fair and poor condition. The goods were not properly handled and the bakeshops were not clean. Two hotels and 1 restaurant were inspected and were found to be in a good, fair and poor condition, respectively. The walls, shelves and tables were unclean.

Bedford, Lawrence County: Pine Hill dairy inspected, found to be in excellent condition. Seven groceries inspected, 1 good, 4 fair and 2 were poor, the stores being badly lighted and ventilated and the counters dirty; 4 meat markets were visited, 2 fair, 2 poor, the refrigerators were unsanitary; 2 drug stores, 1 fair and 1 poor, the back shops being unclean; 2 bakeries, 1 good, 1 fair; 2 hotels, 1 good and 1 poor.

Bloomfield, Greene County: Thirty-four inspections were made; of two dairies inspected, one was in good condition and one was bad, owing to general uncleanliness. Eight groceries were inspected, 2 were fair, six, on account of the unsanitary condition of the refrigerators, shelves, counters and back shops, were in fair condition only. Six meat markets were visited, one was good, 4 were

fair and one was in poor condition, having a foul refrigerator and being unclean. One slaughter house was condemned on account of the unsanitary surroundings. Nine drug stores were inspected, 6 were good, having clean and up-to-date goods, 3 were fair; the prescription counters being unclean. One bakery was in fair condition, and orders were given to clean up. Nine hotels and restaurants were visited; 3 were good, 2 were fairly clean and two were classed as poor owing to unsanitary conditions; the employes were not neat and the floors and refrigerators were unclean, two were bad, being poorly lighted, ventilated and having unsanitary refrigerators.

Bloomington, Monroe County: Thirteen groceries inspected, of which 6 were good, 5 fair, 1 poor and 1 bad, being uncleanly and having foul refrigerator. Seven meat markets were inspected, 6 were good and 1 was fair; 7 drug stores, of which Bowles Bros.' was found to be in excellent condition, while 3 were good, 2 fair and 1 poor. Four bakeries and candy shops were visited; 2 were good, 1 fair and 1 poor. Twelve second inspections were made, eleven of which showed good conditions and one was fair; 184 cans of potted chicken and ham, 1 jar pickles, 55 bottles of extract, 8 jars of apple jelly, 11 jars of jam and 7 bottles of catsup were condemned.

Boonville, Warrick County: Fifteen groceries were inspected; 5 were good, and 10 were fair. Eighty pounds of bacon were condemned. Two meat markets were in good condition. Edward Bohrer's drug store was in excellent condition, and two others were good. Three bakeries were visited; 1 was good, and 2 were fair. Three restaurants were inspected; 2 were good, and 1 was in fair condition. One canning factory, just starting, was in good condition.

Brazil, Clay County: Twenty-one inspections were made. One dairy visited was found to be in good shape. Of 8 groceries, 1 was good, and seven were fair, being unclean. Three slaughter houses were inspected, all were in a fair condition. Orders were given to clean up and fence hogs away from the slaughter house. The meat market owned by Jones & Company was in excellent condition; two were good and one fish market was in poor shape, having unclean walls, floors, shelves and counters. One drug store was in good shape. Of three bakeries, 1 was good and two were fairly clean. The pasteurizing station of Johnson Brothers was in excellent condition.

Brownstown, Jackson County: Twenty-one inspections were

made. Seven groceries were inspected, 4 were good and 3 were fair. One refrigerator was found to be in an unsanitary condition and the back shop was not clean. Three bottles of extract were condemned, being old stock. Of four slaughter houses and meat markets inspected, 3 were fair and one slaughter house was in a poor condition and was condemned. Of five drug stores inspected, 3 were good and 2 were fair, 4 had unclean back shops. One bakery was fairly clean. Of 4 hotels and restaurants visited, 2 were in good shape, 1 was fair and 1 was poor.

Cambridge City, Wayne County: One ice cream factory was in fair condition. Two canning factories were in a fair and bad condition. Better ventilation, drains and cement floors were ordered. Three drug stores were in good condition. Of 8 groceries, 6 were good and 2 were fair. Twenty pounds of candy were condemned. One meat market and one slaughter house were in fair condition. The meat market was not properly lighted and ventilated and the garbage was not removed daily. Two bakeries were fairly sanitary. Three restaurants were found to be in fair condition.

Campbellsburg, Washington County: Three groceries were visited; one was good, one fair and one poor, having a dirty floor. One meat market was fair. Two drug stores were in good shape. Two restaurants were visited and were found to be in a fair and poor condition; the shelves, tables, sinks, etc., were unclean. One creamery was rated fair on account of the bad drainage, and one canning factory was rated poor, due to the open floors and bad drainage.

Cannelton, Perry County: Of 12 groceries inspected, that of P. Clemens' Sons was excellent; 2 were good, 5 were fair, and 4 were poor. Nine were unclean, and 2 were poorly lighted and ventilated. One meat market and one slaughter house were in fair condition. The meat market was poorly lighted and ventilated and the premises about the slaughter house were unsanitary. Three drug stores were in good condition. Three bakeries and confectioneries were inspected; 1 was good, and 2 were in fair condition. Two hotels were inspected; "The Only Sunlight Hotel" was in excellent condition; 1 was fair. One bottling works was in fair condition.

Carmel, Hamilton County: Four groceries were in good condition; 1 meat market was in good condition; 1 slaughter house condemned as being in an unsanitary condition; 1 drug store and 1 hotel were in good condition; 1 candy shop was in fair condition.

Chambersburg, Orange County: Two groceries inspected found to be in fair condition.

Charlestown, Clark County: Eight groceries were visited, of which three were good, three were fair and two were poor. Four slaughter houses and meat markets were visited, of which two were in fair condition and two were poor, and were given ten days to comply with orders. Two drug stores were in good condition. One bakery was marked fair, due to the unsatisfactory light and ventilation. One hotel was in fair condition. One creamery was in good condition and one canning factory was in a bad shape. There was no drainage, the floors were not clean and were open, and the refuse was thrown out in the yard. Orders were left to make improvements at once.

Cicero, Hamilton County: Two groceries were in good condition; also 1 meat market and 1 drug store were in good condition; 2 bakeries were in a good and a fair condition, the latter being unclean; 3 hotels were inspected, 2 were good and 1 was fair.

Clarksville, Clark County: Four groceries were inspected. One was in good shape and three were fair, two were not well lighted and ventilated and one had unclean shelves and counters. One meat market was in fair shape.

Clinton, Vermillion County: Two slaughter houses were inspected, one was found to be in a bad condition and was condemned. The other slaughter house was found to be in poor shape, due to the unsanitary condition of the premises. Ten pounds of meat were condemned.

Columbia City, Whitley County: Two groceries and 2 drug stores were in good condition, while 1 meat market was in fair condition, and 1 resaurant was poor, having dirty floors, being poorly lighted and ventilated, and food being exposed. Two restaurants were in good condition.

Columbus, Bartholomew County: Two dairies were inspected and were found to be in a fair condition. Of 30 groceries inspected, the one belonging to Will Wetz was excellent, 9 were good, 17 were fair and 3 were in poor condition, being unclean. Of 11 meat markets and slaughter houses, 3 were good, 5 fair and 3 poor, being poorly lighted and ventilated and having unclean refrigerators and floors. Theodore E. Otto's drug store was classed excellent, 7 were good and 1 was in fair condition. Eight bakeries and candy kitchens were inspected; the Greek candy store, owned by Zaharako Bros., was excellent, 2 were good and 5 were fair. Five restaurants were visited; 2 were good and 3 were fair, being unclean.

Connersville, Fayette County: Seven groceries were visited. A. H. Rieman's grocery was in excellent shape, four were good and two were fair. Three meat markets were inspected; two were good and one was fair. The garbage was not removed daily. Of four drug stores inspected three were good and one was fair. Five bakeries and confectionery shops were visited. Four were good and one was fair, due to the goods not being properly handled. Orders were left to protect confectionery. Four restaurants were visited. One was good and three were fair. The garbage is not removed daily and the refrigerator was not in a sanitary condition.

Corydon, Harrison County: Six groceries were visited; the W. H. Keller Company has an excellent store, 4 were in good condition and one was poor, due to uncleanness. One slaughter house was in poor shape and orders were left to put the premises in a sanitary condition. One fish market was in good condition. Of two meat markets, one was good and one was fair. One creamery and one bakery were inspected and found to be in good condition. Of three drug stores, two were good and one was fair on account of the prescription counter being unclean. Of ten restaurants and hotels visited, 3 were in good condition, five were fair and 2 were poor, being unsanitary. One canning company was inspected and found to be in fair shape, although the drainage was poor.

Covington, Fountain County: Of nine groceries inspected, that of Mr. Dennis was found to be in excellent condition, 4 were good and 4 were fairly clean. Two meat markets were in good condition and one was fair. Four drug stores were inspected, 3 were good and 1 was fair. Two confectioneries were in good sanitary shape. Of 4 bakeries, one was good, 2 were fair, due to the goods not being handled properly and a general uncleanly condition, and 1 was rated poor because the walls were unclean. Six restaurants and hotels were inspected, 2 were good, 1 was fair and 3 were poor and bad, due to the bad condition of the floors, shelves, tables, sinks; the uncleanly appearance of the employes and the poor ventilation and light in the dining rooms. One canning factory, 1 ice cream factory and 1 bottling works were in fair condition.

Crawfordsville, Montgomery County: Of 5 dairies inspected, 1 was in good condition and 4 were fair, owing to the general condition of uncleanness. Of 12 groceries inspected, 4 were good, 6 were fair and 2 were poor. Four refrigerators were unclean. Six groceries were unclean, and 3 were poorly lighted and ventilated.

Eight meat markets and slaughter houses were inspected; 2 were good, 3 fair, and 3 in poor condition. Five were unclean, 4 had foul refrigerators. Nine hundred and thirty pounds of meat were condemned. Eight drug stores were visited; 3 were good, 4 were fair, and 1 was poor. Three were unsanitary, and 4 had foul refrigerators. Of 6 bakeries and candy shops, 4 were good, and 2 were fair. Of 3 hotels and restaurants, 1 was fair, and 3 were in poor condition, being poorly lighted, unclean, and having foul refrigerators. One bottling works was in excellent condition.

Crothersville, Jackson County: Three groceries were inspected. The condition of 1 was good, while 2 were fair. The dried fruits were not clean. Two meat markets and 2 slaughter houses were inspected. The meat markets were in fair shape, while the slaughter houses were in a poor and bad condition. The floor and side walls were open and there were no screens. Ten days' notice was given to place premises in a sanitary condition. Three drug stores were visited, of which 2 were good and 1 was fair, having a dirty back shop and cellar. One restaurant was in fair condition; the walls and ceilings were unclean. One fruit canning factory was in good shape.

Crystal, Dubois County: Two groceries were inspected and were found to be in a fair and poor condition. The shelves, counters, walls and back shops were unclean.

Dale, Spencer County: Five groceries were inspected, 3 were good and 2 were fair. Fourteen cans of meat and 17 bottles of extract were condemned. Two inspections were made at meat markets and slaughter houses, which were found to be in fair condition. One drug store, having an unclean back room and unclean prescription counter, was rated fair. One bakery and 2 hotels were rated fair. The refrigerator was unclean. Five boxes of meat were condemned. One creamery was in good sanitary condition.

Danville, Hendricks County: Three groceries were classed as good, fair and bad; twenty gallons of vinegar and two dozen bottles of catsup were condemned. Four drug stores were visited, 1 was in a good and 3 were in a fair condition. One quart of ferric chloride was condemned. One meat market was in good condition, while one slaughter house was condemned. One hotel was in fair condition, the walls, ceilings and refrigerator being unclean.

Dayton, Tippecanoe County: Four groceries were found to be: 1 good, 1 fair, 1 poor, and 1 bad. One drug store was in fair condition, but the fountain was unsanitary. One restaurant was in bad condition, being unsanitary.

Delphi, Carroll County: Of 3 dairies visited, 1 was in good condition and 2 were in fair shape and were ordered to be cleaned up. Of 10 groceries, that of Ralph Hill was in excellent condition, 4 were good and 5 were fair, being poorly lighted and ventilated. Four had unclean back shops, shelves and counters and 1 had a foul refrigerator. Of 6 meat markets and slaughter houses, 2 were in good condition, 3 were fair and 1 was in bad shape and was condemned. Six drug stores were visited, that owned by W. S. Margowski was in excellent condition, 3 were good and 2 were in fair condition. Of 4 bakery and confectionery shops, 2 were good and 2 were fair, being unclean. Nine hotels and restaurants were visited, 7 were fair, having unclean floors, walls and ceilings, and 2 were poor, due to poor light, ventilation and being unclean. One cannery was in good shape and 1 bottling works was found to be in fair condition.

Dugger, Sullivan County: Three groceries were in good shape. One meat market was in good condition. Notice was given to cover meat. Two slaughter houses were in fair condition. Notice was given to put premises in a sanitary condition. Two drug stores were found to be in a good and fair condition. The goods were not up-to-date; the proprietor and clerks were not clean and tidy. Three restaurants were in good and fair condition. Notice was given to remove garbage, clean yard and fix drain.

Dunreith, Henry County: One canning factory was visited and was found to be in good sanitary condition.

Eaton, Delaware County: Two groceries were visited; 1 was good and 1 fair. Of 3 meat markets and slaughter houses, 1 was in good condition, and 2 were in fair condition. One drug store was in fair condition. Two hotels were in a good and fair condition.

Ellettsville, Monroe County: One drug store and 1 restaurant were in fair condition. The kitchen was not well lighted and ventilated, and the shelves, tables and sinks were not clean. Three groceries were inspected, 2 were good and 1 was fairly clean; 18 cans of potted ham were condemned. Two meat markets were in fair shape and 1 slaughter house was given ten days to comply with orders and make changes to put the premises in a sanitary condition.

Elwood, Madison County: Of 5 groceries, 1 was good, 3 were fair, and 1 was in poor condition, having a foul refrigerator and being unclean. Ten meat markets were visited; 2 were in good condition, 7 were fair, and 1 was poor. All 10 were in an unclean

condition, and 5 had foul refrigerators, while 1 was poorly lighted and ventilated. One confectionery was in fair condition. Five drug stores were visited, 3 were good, 2 fair. One hotel was classed as good.

English, Crawford County: Four groceries were visited; 3 were good, and 1 was in fair condition. One meat market was in fair condition, and 1 slaughter house was in a poor condition and was arranging to go out of business. One drug store was in good condition. One restaurant was good, and 1 was poor. One bakery was fair. One canning factory was getting in line preparatory to canning tomatoes.

Evansville, Vanderburg County: Thirty-eight dairies were inspected, of which 8 were good, 20 fair, 9 poor and 1 was in bad condition and was condemned. Ninety-three groceries were visited. William E. Meier's grocery was in excellent condition, 27 were good, 37 fair, 26 poor and 3 were bad, being very unsanitary; 25 were unclean, 8 refrigerators were unsanitary and 3 were poorly lighted and ventilated. Forty-five meat markets and slaughterhouses were inspected; 1 meat market and the Evansville Packing Company slaughterhouse, which is also under government inspection, were in excellent condition, 7 were good, 27 fair, 8 poor and 1 was bad, being unclean. Twenty-nine drug stores were inspected, 17 were good, 11 fair and 1 was poor, being unsanitary. Twenty-six bakeries and confectioneries were inspected, bakeries owned by Mrs. Jacob Smidt and Fred Miller, and the confectionery owned by Christian Bros., were found to be in excellent condition, while 9 were good, 9 were fair, 2 were poor and 3 were bad. One bakery was condemned until placed in a sanitary condition, ten days' notice was given to comply with orders. Orders were given to cover all candies and pastry. Twenty-three hotels and restaurants were inspected; the Evansville Depot Restaurant was in excellent condition, 5 were classed as good, 6 fair, 10 poor and 1 bad. Three restaurants were unclean and 4 had foul refrigerators. Three bottling works and 1 brewery were also visited and all were found in fair condition. Eleven second inspections were made. Of 8 groceries inspected, that of W. E. Meier's was in excellent condition, 5 were good and 2 were fair; 115 bottles of extract, 62 cans of meat, 50 boxes of spices and 25 cans of fruit were condemned. Three drug stores were in good condition.

Fairmount, Grant County: Of 5 groceries inspected, those of E. W. Jay, Hall & Hall and W. R. Bailey were excellent; 2 were in good condition. Of 7 meat markets and slaughterhouses, 3 were

good, 2 fair, 1 poor, and 1 bad. The conditions surrounding this slaughterhouse are very unsanitary. Four drug stores, 4 bakeries and 3 restaurants were in good condition.

Farmersburg, Sullivan County: Two groceries were visited; 1 was good and 1 was fair.

Fort Branch, Gibson County: Sixteen inspections were made. Of 6 groceries, 4 were in good condition and 2 were fair, being unclean. One meat market was in good condition, while 2 slaughter houses were in fair condition only, and were given ten days' notice to comply with orders. Two drug stores were in fair condition, due to dirty prescription counters. One bakery was found to be in good shape. One poultry house was in fair condition. Of three restaurants visited, 2 were fair and 1 was in a bad shape, being unsanitary; 12 cans of oysters, 92 cans of potted meats and 96 bottles of extracts were condemned.

Fortville, Madison County: Four groceries were inspected; 2 were good and 2 were fair. Five meat markets were inspected; 2 were good and 3 were fair, being unclean. One bakery was in a fair condition. One restaurant was in good condition, and one dead animal house was in fair condition.

Fort Wayne, Allen County: Thirty-one dairies were inspected. The following were in excellent condition: Peter Certia, John Kent and Ellison Dairy Company; 5 were good, 7 fair, 4 poor and 12 bad, on account of the general uncleanly condition, lack of drainage, etc. One place is described as being "filthy beyond description;" at another dairy visited typhoid fever existed. Of 14 groceries inspected, those of G. E. Spiegel, J. J. Corman, G. Hitzemann, Kennedy & Darby, Charles H. Buck and Kayser & Boade were in excellent condition; 5 were good and 3 were in fair condition, being badly lighted, ventilated and unclean. Of 3 meat markets, 1 was good, 1 fair and 1 poor. Of 18 drug stores inspected, 17 were in excellent condition, and 1 was in good condition. Of 4 bakeries and candy shops inspected, that of James Bruno was in excellent condition; 1 was good, 1 fair and 1 poor, being unclean. Of 20 hotels and restaurants, the following were excellent: James Selby, Mrs. J. Klinger, C. Wagner, J. C. Hinton, J. A. Reilly, and Mrs. C. Frederick. Six were good, 3 fair, and 5 in poor condition; 4 were unsanitary; 2 had foul refrigerators. Two packing houses were in fair condition; the drainage was poor and the sanitary surroundings were bad. The Berkhoff Brewery and the wholesale houses of the National Biscuit Co., where 120 are employed; the Perfection Wafer Co., employing 150, and the Heil-Miller-Lane

Co., confectionery, were in excellent condition, being sanitary in every respect.

Frankfort, Clinton County: Six dairies were inspected; all were unclean, being in a fair and poor condition. These dairies were all ordered to be improved to comply with the law. Twenty-two groceries were inspected, of which the wholesale grocery of R. P. Shanklin & Co., McDowell, Britton & Cheadle Company, and the wholesale grocery of J. C. Shoffer & Company were found to be in excellent condition. Fourteen were good and 6 were in a fair condition. Two dozen bottles of extract were condemned. Seven meat markets and slaughter houses were visited, 4 were good, 2 fair and 1 was bad. Three slaughter houses were ordered to be improved to comply with the law. Two drug stores were visited; Elbert B. Merrill's was in excellent condition; the other one was in good shape. Of 3 hotels and restaurants visited, 1 was good and 2 were fair. Out of 4 bakeries and candy shops, that of Crane Brothers was excellent, 2 were good and 1 was poor, being unsanitary. One canning factory was inspected and was found to be in poor condition, being very dirty and using rotten products. Ten second inspections were made. Merritt's drug store, Pavey Bros'. grocery and the wholesale grocery of McDowell, Britton & Cheadle were in excellent condition. Three groceries and 1 dairy were in good shape, while 1 grocery and 1 dairy were in fair condition, on account of uncleanness.

Franklin, Johnson County: Nine groceries were inspected; 7 were good and 2 fair. Six meat markets and slaughter houses, and 4 drug stores, were in good condition. Three bakeries and confectioneries were visited; 1 was fair and 2 were poor, being unclean and dishes not being properly washed. Three hotels and restaurants were visited; 1 was good and 2 were fair, the refrigerator, tables, sinks, shelves, etc., were unclean. One ice cream parlor was visited; the soda fountain was not in good condition.

Fredericksburg, Washington County: Two groceries were classed as good and fair. One drug store was in good condition.

French Lick, Orange County: Five groceries were visited, of which the store of Wells, Cave & Glenn was in excellent condition, 3 were good and 1 was fair. Of 5 meat markets and slaughter houses inspected, that of Wells, Cave & Glenn was excellent, 3 were good and 1 was in fair condition. Three drug stores were visited. Eleven hotels were visited. The French Licks Springs Hotel and the Wells Hotel were in excellent condition, while 2 were good and 7 were in fair condition.

Galena, Floyd County: One grocery was in fair condition.

Galveston, Cass County: Of 3 groceries inspected, that of G. W. McCoy was excellent; 1 was good, and 1 was fair, being unclean. One meat market was in good condition. One drug store was in good condition. One bakery was fairly clean. Of 3 hotels and restaurants, 2 were good and 1 was fair, being unclean. One ice cream factory was in good condition.

Gary, Lake County: Four restaurants were inspected; those owned by Walter McNally and M. Schwarz were in excellent condition; the other two were fairly clean.

Gas City, Grant County: Sixteen inspections were made. Of 6 groceries visited, 3 were good and 3 were fair; the refrigerator was not clean and the garbage was not removed daily. Of 5 meat markets, 1 was good and 4 were fair. One drug store was in good shape. One bakery and three restaurants were in fair condition, being unclean. Fifteen pounds of dried peaches were condemned.

Greencastle, Putnam County: One dairy was inspected and found to be in a fair condition. Nine groceries were inspected; the one owned by Charles Broadstreet was in excellent condition; 2 were good, 5 were fair, and 1 was poor, having unclean refrigerator and floor. Of 6 slaughter houses and meat markets, 3 were good, 1 was fair, 1 poor, and 1 bad; 884 pounds of meat were condemned, and three slaughter houses were condemned until made to meet the requirements of the law. Four drug stores were visited. The Red Cross Drug Company was in excellent condition; 2 were good, and 1 was fair, having an unclean prescription counter. Two bakeries were inspected; 1 was fair and 1 poor. The goods were not properly handled and the bakeries were unclean. Three restaurants were inspected; 1 was good, and 2 were poor. The garbage was not removed daily and the floors were not clean.

Greenfield, Hancock County: Seven groceries were inspected, 4 of which were good and 3 were fair. Seven meat markets and slaughter houses were inspected; 4 were in good condition and 3 were fair. The premises about the slaughter houses were not clean and sanitary. Four drug stores were in good condition. Four bakeries and confectioneries were inspected, and all were in fair condition. Of 5 hotels and restaurants visited, 4 were good and 1 was fair; the refrigerators, walls and ceilings were unclean.

Greensburg, Decatur County: Six meat markets and slaughter houses were inspected. The slaughter house and meat market of Link & Bobrink and H. Kammerling's meat market were in excel-

lent condition. Two were good and 2 in bad condition, being unsanitary. The De Ormond Hotel was in excellent condition, while the other one inspected was rated good. One bakery was inspected and was in a dirty condition. Two groceries were inspected and found to be in good condition.

Greentown, Howard County: One grocery inspected was found to be in fair condition; 2 meat markets were in good condition; 2 drug stores, 2 bakeries and 1 hotel were found to be in a fair condition.

Greenville, Floyd County: Three groceries inspected; 1 was good and 2 were fair; 2 hotels were in a fair condition.

Hammond, Lake County: Nine groceries were inspected. Jas. L. Humpfer & Co.'s grocery and meat market was in excellent condition, 7 were good and 1 was fair; 11 meat markets were inspected, 1 was excellent, 8 were good and 2 were fair; 5 drug stores were in good condition. Of 10 bakeries and candy shops inspected, 7 were good and 3 were poor, being in an unclean condition. Ten calves were shipped from Crown Point to Hammond in an unsanitary condition; the men were arrested and fined \$10 and costs each, and the court ordered the condemned meat to be tanked. One fish dealer was found to be mixing old fish and fresh fish, which caused 45 pounds to be condemned, and he was fined \$10 and costs. Fifteen pounds of meat out of refrigerators were also condemned. Of seven hotels and dining rooms inspected, 6 were good and 1 was fairly clean. Bread and cakes that were exposed to dirt and flies were ordered to be covered up.

Hardinsburg, Washington County: The plant of the Hardinsburg Creamery Company was in excellent condition; 3 groceries were in good, fair and poor condition, being unclean; 3 hotels were inspected, 1 was good and 2 were fair.

Haysville, Dubois County: Two groceries and 1 restaurant were found to be in fair condition, due to unclean shelves and counters.

Henryville, Clark County: Of 6 groceries inspected 1 was good and 5 were fair. The dried fruits in 5 stores were unclean. One meat market was in poor condition; the floor, walls, ceilings and refrigerator were not clean. One lunch stand, which consisted of a screened place on the street, with sawdust floor, was in a poor condition. One hotel was fairly clean. One canning factory was in fair condition. The drainage was not what it should be.

Hillham, Dubois County: Two groceries were in a fair state of cleanliness.

Howell, Vanderburg County: Two drug stores and one bakery

and confectionery were in good condition. Three hotels and restaurants were inspected; 2 were good and 1 was in a poor condition, due to unclean floors, shelves and tables. Of 5 groceries visited, 1 was good and 4 were fair, having unclean back shops, shelves and counters. Fifteen bottles of extract, 17 cans of meat, 5 bottles of maple syrup and 5 cans of apple butter were condemned. Two meat markets were in good condition and 1 slaughter house was rated poor. Ten days' notice was given to comply with orders.

Huntingburg, Dubois County: One creamery was found to be in good condition. Of 12 groceries visited, that owned by W. F. Bretz was in excellent condition; 6 were good and 5 fair, being unclean. Of 3 meat markets, 1 was good, and 2 were fair. Of 3 drug stores, that of A. H. Miller, Jr., was in excellent condition; 1 was good, and 1 fair. Four bakeries and confectioneries were inspected; 2 were in good condition, and 2 were fair. Seven hotels and restaurants were visited; 4 were good, 2 fair, and 1 poor. Three were unclean, and in 2 the dish washing was not properly done. One brewery was good, and 1 poultry house was fair, being unclean.

Twenty-one second inspections were made. Much improvement is shown over the inspections made two months ago. Of 11 groceries inspected, that of W. F. Bretz was in excellent condition, 7 were good and 3 were fair. Two restaurants and 2 meat markets were in good condition. Orders had been carried out completely. Two drug stores were inspected, that of A. H. Miller, Jr., was found to be in excellent condition. One other was in good condition. Two bakeries were in good condition and one confectionery was fair, due to dirty shelves and counters. One hundred sixty-four bottles of extracts were condemned, being old stock.

Huntington, Huntington County: Of 4 groceries inspected, that of McCaffrey Brothers was in excellent shape, 2 were good and 1 was fair, having a dirty back shop, floor, shelves and counters. Three meat markets were visited. Those of N. Windemuth and L. A. Ertzinger were in excellent condition, while the third was good. Of 4 drug stores examined, A. J. Stevens and Schaefer & Schaefer were excellent, 2 were fair; in one store the goods were not clean and up to date. Of 3 bakeries and confectioneries visited, 2 were good and 1 was poor, having dirty floor, walls, ceilings, shelves and counters. Of 3 restaurants visited, 1 was good, 1 fair and 1 poor. Two were unclean and 1 was poorly lighted and ventilated.

Indiana Harbor, Lake County: One grocery and 1 meat market were found to be in good condition.

Indianapolis, Marion County: Four dairies were inspected and were found to be in fair condition. Of 281 groceries inspected the following were found to be in excellent condition: Columbia Grocery Company, N. A. Moore, R. M. Mueller, George Popp, J. T. Powers & Son, M. C. Shea, Goldstein & Cooke, and J. M. Carvin & Son; 113 were in good condition, 148 were fairly clean, 11 were in a poor condition and 1 was in bad shape. Ten refrigerators were in an unsanitary condition. Eighty-three pounds of candy and 75 pounds of dates were condemned. Of 219 meat markets inspected, the following were found to be in excellent condition: Charles Gardner, Goldstein & Cooke; 93 were in good condition, 116 were fair, 6 were poor and 2 were bad. Seven refrigerators were unsanitary. Two hundred and fifty pounds of meat out of refrigerators, 400 pounds of mutton and 15 pounds of wienerwurst were condemned. Of 137 drug stores inspected, the following were found to be in excellent sanitary condition: Muhl Drug Company, Weber Drug Company, J. J. Keene Number 1, C. H. Eichrodt, Frank H. Carter, E. H. Wilson and Ed. Ferger's; 77 were in good condition, 49 were fair and 4 were poor; 8 were unclean. One gallon fountain syrups was condemned. Of 72 bakeries and candy shops inspected, Taggart's bakery was in excellent condition, 24 were good, 38 were fair, 5 were poor and 4 were in bad shape, being unsanitary and having bread, cakes, candy, etc., exposed to dirt and flies. Of 39 hotels and restaurants inspected, L. S. Ayres's restaurant was classed as excellent, 11 were in good shape, 19 were fair, 6 were poor and 2 were in bad shape, due to general uncleanness. One winery was in good condition. Four hundred and eighty-five second inspections were made. Of 218 groceries, 8 were excellent, 45 good, 154 fair, 10 poor and 1 bad. Of 72 meat markets and slaughter houses, 4 were excellent, 22 good, 39 fair and 7 poor. Of 69 drug stores, 39 were good, 26 fair and 4 poor. Of 74 bakeries and candy shops, 7 were good, 59 fair and 8 poor. Of 52 hotels and restaurants, the Claypool Hotel and Hopkins restaurant were excellent, 18 were good, 29 were fair and 3 were poor. Two bottling works and 1 Coca Cola works were found to be in fair condition. Sixty-seven pounds of meat out of ice boxes, 15 pounds of sausage and 21 quarts of blackberries were condemned.

Jasonville, Greene County: Seven groceries were inspected; 6 were fair, and 1 was poor; all were unclean. Three meat markets were visited and 95 pounds of meat were condemned. Two meat markets were in fair condition, and 1 was poor. All had unclean

refrigerators. Two drug stores and 1 bakery were in good condition. Six hotels and restaurants were visited; 5 were fair and 1 was poor; all were unclean. One bottling works was in good condition.

Jasper, Dubois County: Two drug stores and 1 meat market were in good condition. Of 7 groceries inspected, that of John T. Melchior was in excellent condition, 4 were good and 2 were fair, having unclean refrigerators or back shops. Eighteen bottles of extract and 4 bottles of catsup were condemned. Two confectioneries were in good condition. One bakery was in fair condition. Two hotels were in good condition, while 1 restaurant was rated fair, due to the damp cellar and the poor light in the kitchen.

Jeffersonville, Clark County: Twenty groceries were inspected. Best Bros.' grocery was found to be in excellent condition, 4 were good, 11 fair, 3 poor and 1 bad; 7 meat markets and slaughter houses were inspected; 2 were good, 3 fair and 2 were poor. Of 7 drug stores, 6 were good and 1 was fair. Of 3 bakeries and candy shops, 2 were good and 1 was fair. Of 3 hotels and restaurants, 1 was good, 1 fair and 1 poor.

Jonesboro, Grant County: One restaurant, 1 bakery, 2 drug stores, 4 groceries and 1 meat market were all in good sanitary condition, excepting the garbage was not removed daily. One dairy was in a fair state of cleanliness.

Kellerville, Dubois County: One grocery was inspected and found to be in fair condition. No screens were provided for the doors and windows.

Kirklin, Clinton County: Five groceries were visited; 3 were in good condition, while 2 were in fair condition. Two meat markets were inspected; that of Oliver M. Neal was excellent, the other was in fair condition, having a foul refrigerator and being unclean. One creamery was inspected and found to be in poor condition, and was ordered improved to comply with the law. One slaughter house was ordered improved as to sanitary conditions. Two drug stores were visited and were in good and fair condition.

Knightstown, Henry County: One dairy was visited and was found to be in fair condition. The conditions as to light and ventilation were bad. Five groceries were visited; 3 were good and 2 were fair. Of 7 meat markets and slaughter houses inspected, 3 were good, 3 fair and 1 was bad, and the owner is going to rebuild. Of 4 drug stores visited, 3 were good and 1 was in fair condition. Two bakeries were in fair shape. Three restaurants were inspected, and 2 were found to be in fair shape, while 1 was good. The garb-

age was not removed daily and the restaurants were fairly clean. One sorghum works was inspected and was in good condition. A new floor was ordered to be put in.

Kokomo, Howard County: Seven grocery stores were inspected; 1 was in good condition and 6 were in a fair condition. Of 8 meat markets, 7 were fair and 1 good. Five drug stores were in good condition. Five bakeries and candy shops were visited, 4 were good and 1 was poor, being unventilated, unclean and having a foul refrigerator. Nine hotels and restaurants were visited. The Hotel Francis was in excellent condition, 5 were good, 1 fair and 2 poor.

Lafayette, Tippecanoe County: Ninety-nine first inspections and ten second inspections were made. Of 27 dairies visited, 1 was in good shape, 11 were fair, 9 were poor and six were in bad condition. Three dairies were condemned until the premises were put in a sanitary condition. One dairy license was annulled. Notice was given many dairymen to clean up in a week or their places would be condemned. Notice was given some 15 dairymen to clean up, drain and whitewash and place their dairies in a better sanitary condition. Of 29 groceries visited, the following were in excellent condition: Beck & Frasch, James Fox, and the wholesale grocery houses of R. V. Pierce & Company, R. P. Shanklin & Company and Monnehan's. Seven had foul refrigerators and 25 were unclean. Of 25 meat markets inspected, 7 were good, 11 were fair and 7 were poor. Sixty pounds of meat and two dozen bottles of tomato catsup were condemned. Of 8 drug stores visited, those of Albert H. Kienly and the Lafayette Pharmaceutical Company were found to be in excellent condition, 4 were good and 2 were fair, on account of the unsanitary condition of the fountain and an unclean prescription counter. One confectionery and one bakery were in a good and poor condition, the bakeshop was not clean and the goods were not properly handled. Of 10 hotels and restaurants inspected, 3 were good, 4 were fair and 3 were poor. Eight were unclean and 2 had foul refrigerators. Many did not remove the garbage daily. One wholesale liquor house was in good condition and 1 creamery and 1 packing house were in fair condition. Two meat markets which had been inspected before were in fair condition only. Twenty-five pounds of fish were condemned. Of 8 dairies which had been inspected before, 1 was good, 5 were fair and two were in a poor condition and were condemned until made to comply with the law.

Lawrenceburg, Dearborn County: Ten dairies were inspected

1 was fair, 2 were poor and 7 were in a bad condition. The following feed their cows on slop from distilleries: Henry Bobrink, Jr., Henry Bobrink, Sr., W. P. Squibbs & Co., and Oberting Bros. Twelve groceries were inspected, 3 were good, 8 were fair and 1 was poor. Five meat markets were visited, 4 were good and 1 was in fair condition. Of 5 drug stores, 4 were good and 1 was in a fair condition. Five bakeries and confectioneries were visited, 2 were good, 1 was fair and 1 was in a poor condition. Two restaurants were inspected and were found to be in good and fair shape. One brewery was inspected and was in fair shape. The Lawrenceburg Milling Company, which is the largest mill in the State, was found to be in excellent condition.

Lebanon, Boone County: Two groceries were inspected; 1 was good and 2 fair. Three meat markets were good. One slaughter house was ordered improved to comply with the law. Five drug stores were visited; 3 were good and 2 fair. Three bakeries and candy shops were rated as good, fair and poor. Six hotels and restaurants were inspected, 4 were good, 2 were fair; the one owned by Frank Dale was in excellent condition.

Lewis, Vigo County: Three groceries were inspected, 2 were good and 1 was fair. One meat market, being very unsanitary, was classed poor.

Linton, Greene County: Ten dairies were inspected; 2 were good, 4 fair, 3 poor, and 1 bad. Four were unclean. Eighteen gallons of milk were condemned. Of twelve groceries inspected, the Linton Supply Company was in excellent condition, 3 were good and 8 were fairly clean. Eight bottles of lemon extract and 12 bottles of mustard were condemned. Of 12 meat markets and slaughter houses inspected, 5 were good, 2 were fair and 5 were in bad condition, being very unsanitary. Three were condemned, and two previous condemnations were continued. Ninety pounds of meat and 25 pounds of lard were condemned. The Linton Bottling Works was in excellent condition. Three drug stores were inspected; that of Henry Steelman was excellent, 1 was good and 1 was fairly clean. The confectionery owned by W. A. Murray was in excellent condition. One confectionery was in fair shape, 1 bakery was in poor condition and 1 ice cream factory was in a fair condition. Of 7 hotels and restaurants inspected, 2 were good, 1 was fair, 3 were poor and 1 was in a bad condition, and orders were left to give same a general overhauling. Five were unclean, badly lighted and ventilated and had foul refrigerators.

Logansport, Cass County: Thirty inspections were made. Of

9 groceries visited, that owned by J. H. Foley & Company was in excellent condition, 6 were good and 2 were in fair condition. Of 13 meat markets and slaughter houses, 5 were in good condition, 7 were fair and one was in bad shape and was condemned. Ten pounds of beef and 15 pounds of mutton were condemned. Two drug stores were in good condition and 1 was in fair shape only. Four bakeries and candy shops were visited; 2 were good and 2 were in fair shape. The ice cream factory owned by W. I. Shearer & Son, was in excellent condition, having cement floors and being sanitary in every respect. Of 4 hotels and restaurants, 2 were good and 2 were in fair condition.

Loogootee, Martin County: Nine groceries were inspected; 3 were good, 5 fair and 1 poor, being unclean. Five meat markets and slaughter houses were inspected; 1 was good, 1 fair and 3 were in a bad condition and were ordered to make their places sanitary. One poultry house was in a bad condition and extensive improvements were ordered. Two drug stores were in good condition. Opal Brothers, confectionery and candy kitchen, was in excellent condition. One bakery was in good condition. Two hotels and restaurants were in poor condition, being poorly lighted, the floor, ceiling and walls were unclean, and the dishes were not properly rinsed. One hundred pounds of meat were condemned.

Madison, Jefferson County: Of 32 groceries, 9 were good, 17 fair, and 6 were poor, being unclean, poorly lighted and ventilated. Of 18 meat markets and slaughter houses, those of Henry Schneider and Gus Yunker were excellent; 7 were good, 8 fair, and 1 poor. Of 10 drug stores, that of Jas. Hargan, Jr., was excellent; 4 were good, 3 were fair, and 2 were poor, being unclean. Of 10 bakeries and candy shops, 3 were good, 6 fair, and 1 was poor. Of 3 restaurants, 1 was good, and 2 were poor. One brewery and 1 chewing gum factory were inspected.

Marengo, Crawford County: Four groceries were inspected; 1 was in good condition, 2 were fair, and 1 was poor. Three were somewhat dirty, and 1 refrigerator was unclean. One meat market and one slaughter house were visited; 1 was in poor condition, and 1 was bad. The premises were very unclean and unsanitary. Of 3 drug stores inspected, 1 was in good condition, and 2 were in fair condition. One confectionery was in good condition. Two restaurants were in poor condition, being unsanitary in that the walls, floors, refrigerators, etc., were unclean, and the dishes were not properly washed and rinsed. One canning factory was inspected and arrangements were made for better sanitary conditions.

Marion, Grant County: One creamery was visited and was found to be in fair condition. Of 20 groceries inspected, the following were in excellent condition: M. L. Swaysee, M. E. Barton and J. H. Poston. Eleven were in good condition, 5 were fair, and 1 was poor. Four were unclean. Of 15 meat markets and slaughter houses inspected, the following were excellent: Levy Sons, M. L. Swaysee, B. F. Long and Arthur Street. Eight were good, 2 were fair, and 1 was in poor condition. Three were unclean. Of 4 drug stores inspected, 3 were in good condition, and 1 was fair. One confectionery was in bad condition, being very unsanitary. Of 16 hotels and restaurants inspected, the dairy lunch owned by Turner Overman and the restaurant owned by M. C. Wallet and Clay Mullen were in excellent condition. Six were in good condition, 5 were fair, 2 were poor, and 1 was bad. Four were poorly lighted, and 6 were unclean, and 1 had foods exposed to dirt and flies; 1 was very unsanitary and needed a general overhauling. Two ice companies were found to be in good condition.

Martinsville, Morgan County: Fifteen groceries were inspected. That of C. W. Rose was in excellent condition, 4 were good, 8 were fair and 2 were poor, not being sanitary. Four had foul refrigerators. Six meat markets and slaughter houses were inspected. One was good, 4 were fair and 1 was poor. Orders were left to make improvements, screen, whitewash, etc. Ten days' notice was given to comply with orders. Six drug stores were in good condition. Two bakeries were in a fair and poor condition; the store rooms were not tidy or well kept. Nine hotels and restaurants were inspected. Two were good, 5 were fair and 2 were poor. The dining rooms were good but the kitchen arrangements and store room facilities were bad. One packing company was in good condition.

Mechanicsburg, Clinton County: Of 3 groceries inspected, 2 were in good condition, and 1 was poor. One meat market was in a poor condition, having a foul refrigerator and being unclean.

Memphis, Clark County: Three groceries were visited, of which 1 was good and 2 were fair, having unclean shelves, counters and ceilings. One canning factory was in fair condition; the floors were open and the drainage was bad.

Michigan City, Laporte County: Three groceries and 1 drug store were found to be in good condition. Four slaughter houses were inspected and were found to be in a fair, poor and bad condition. One slaughter house was condemned, notice was given the others to clean up or their places would be condemned. Twenty-

five pounds of meat were condemned. One ice cream factory was in good condition. Four bakeries and confectioneries were visited, 2 were found to be in good condition and two were fair, the draft tubes in the soda fountain were dirty, the bakery was not clean and the goods were not properly handled. Two restaurants were in a good and fair condition, the refrigerator was not clean and free from odor.

Mishawaka, St. Joseph County: One slaughter house was inspected and was found to be in good condition.

Mitchell, Lawrence County: Eleven groceries were inspected, that of Head & Coleman was in excellent condition, 5 were good and 5 fair. Two meat markets and 2 bakeries were in fair condition. Of 4 drug stores, 3 were fair and 1 good. Of 3 restaurants and 1 hotel, 2 were fair and 2 were poor.

Monticello, White County: One grocery and one drug store were in good condition. The bakery and confectionery owned by T. G. Harlocker was found to be in excellent condition. Two manufacturers of soft drinks had good places. One hotel was in good condition and 1 restaurant was in poor shape. Notice was given to clean up and fix walls of kitchen at once.

Mooresville, Morgan County: Seventeen inspections were made. Of 9 groceries inspected, 1 was good, 6 were fair and 2 were bad, being in an unsanitary condition; the back shop, shelves and counters were unclean. Four meat markets were inspected and found to be in a fair state of cleanliness. Four drug stores were visited, 3 were fair and 1 was poor; the goods were not clean and up to date and the patents were not properly labeled. One bakery was in good condition and 1 ice cream parlor was in a fair state of cleanliness. Of two hotels and restaurants visited, 1 was good and 1 was fair; the dining room was not well ventilated or lighted.

Mount Vernon, Posey County: Seven groceries were inspected; Klein & Mason's grocery was found to be in excellent condition; 1 was good, 3 were fair, 1 was poor and 1 bad, the sanitary conditions being very poor. Seven cans of meat, 16 bottles of extracts and 7 cans of cream were condemned. Four meat markets and slaughter houses were found to be in good and fair condition. Ten days' notice was given to comply with orders to clean up premises. Three drug stores were visited; that owned by D. & H. Rosenbaum was in excellent condition, 1 was good and 1 was fair. One ice cream parlor and 1 confections and fruits were in good condition. Five hotels and restaurants were found to be in fair and poor condition. All were unclean; the rooms were not well lighted or ventilated,

the floors, walls and ceilings were not clean, and the dishes and tableware were not properly washed. Thirteen second inspections were made. Of 7 groceries visited, that of Klein & Masen was in excellent condition, 4 were good, 1 was fair and 1 was poor. Of 3 drug stores visited, that of D. & H. Rosenbaum was in excellent condition and 1 was in good condition. Three restaurants were found to be in a fair and poor condition, due to uncleanness.

Mulberry, Clinton County: Three dairies were inspected and all found to be in a bad condition. One creamery and 2 dairies were ordered improved to comply with the law. Four groceries were inspected and 1 classed good, 1 fair and 2 bad, being unsanitary, badly ventilated and lighted. Four meat markets were visited; 2 were good and 2 fair. One slaughter house was ordered improved to comply with the law. Two drug stores were found to be in a good and fair condition. Two restaurants were in good condition.

Muncie, Delaware County: One hundred and eleven inspections were made. One dairy was found to be in fair condition. Of 28 groceries inspected, 9 were in good condition, 18 were fair and 1 was poor. Many stores were not provided with screens and the garbage was not removed daily. Fifteen pounds of dates were condemned. Thirty-three meat markets and slaughter houses were inspected, 10 were in good condition, 21 were fair and 2 were poor, the premises not being in a sanitary condition. Four meat markets were unclean and 2 had foul refrigerators. Two hundred pounds of pork and 75 pounds of beef were condemned. Of 12 drug stores inspected, 11 were in good shape and 1 was fairly clean. One ice factory and milk depot was in good condition. Of 18 bakeries and candy shops, that of Richard Cunningham's was in excellent condition, 2 were good, 14 were fair and 1 was poor, being poorly lighted, ventilated and unclean. Of 18 hotels and restaurants inspected, 2 were in good shape, while 15 were fair and 1 was poor. The garbage was not removed daily, the walls and ceilings were unclean or the refrigerator was not free from odor.

New Albany, Floyd County: One milk station was found in good condition. Fifty groceries were inspected. The following grocery stores were excellent: The Great Atlantic and Pacific Tea Company, R. L. Grosheider, and August Oetken; 11 were good, 27 fair, 7 poor and 2 were bad. The New Albany Ice Company was in excellent condition. One brewery was in good condition. Of 40 meat markets and slaughter houses, 4 were good, 29 fair, 5 poor and 2 were bad. Of 14 drug stores, those of Chas. B.

Dorsey and A. N. Hoover were excellent, 6 were good and 6 were fair. Six bakeries and candy shops were visited; Stein's bakery was in excellent condition, being sanitary in every respect, 2 were good and 3 fair. Eight hotels and restaurants were inspected, of which 3 were good, 3 fair and 2 were poor, being badly lighted and ventilated and unclean.

Newburg, Warrick County: Of eight groceries visited, 3 were good, 4 were fair and 1 was poor. Three were unclean. Seventy-six bottles of extract, 31 cans of meat, 11 cans of baking powder, 23 cans of tomatoes, 9 bottles of catsup and one glass of jelly were condemned as being old stock. One canning factory was in fair condition. Two hundred pounds of tomato pulp were condemned. Two meat markets and 2 drug stores were found to be in good condition. One confectionery was in fair condition and 1 bakery was in poor shape, owing to the dirty condition of the bakeshop. One restaurant was in fair condition, not being well lighted or ventilated, and the dishes were not properly rinsed.

New Castle, Henry County: Thirty-six inspections were made. Three dairies were in fair shape. Changes will be made to better the unsanitary conditions. One creamery and ice cream plant was in fair shape, due to water standing under the wooden floor. Five drug stores were in good condition. Of 9 groceries visited, 4 were good and 5 were fair. Of 7 meat markets and slaughter houses inspected, 2 were good, 4 were fair and 1 was poor, the premises were in very bad shape, the floor was very dirty, there being no drainage. Ten days' notice was given to place premises in a sanitary condition. Five bakeries and confectioneries were inspected; 1 was good and 4 were fair, the shops were not sanitary or the goods were not properly handled. Of 6 restaurants, 1 was good and 5 were fair. Two were unclean and 3 had foul refrigerators.

New Harmony, Posey County: Seventeen inspections were made. Three drug stores and 1 confectionery were in good shape. One hotel was good and 3 restaurants were fair, due to unclean walls and ceilings. Four meat markets and slaughter houses were visited; 3 were good and 1 was poor. Ten days' notice was given to comply with orders. Of 5 groceries visited, 3 were good, 1 was fair and 1 was poor. Two were unclean and 1 was badly lighted and ventilated. One hundred and sixty-five bottles of extract, 12 packages tomale, 12 packages of pork and beans, and 6 cans of beef were condemned.

Newport, Vermillion County: Four groceries were inspected. One was good, 2 were fair and 1 was poor. All were unclean and

1 had a foul refrigerator. Two meat markets were in good shape. Of 2 drug stores visited, 1 was good and 1 was fair; both were unclean. One bakery was in good condition. Of 4 restaurants and hotels inspected, 1 was good and 3 were fair; 2 were unclean and were not well lighted or ventilated.

Noblesville, Hamilton County: The dairy depot of Harris & Craw was inspected and found to be in excellent condition. Nine groceries were inspected, those of A. D. Conden and Caylor's being in excellent condition, 3 were good, 3 fair and 1 poor. Of 5 meat markets inspected, 4 were fair and 1 was poor. Five drug stores were inspected, that of C. L. Mitchell being excellent and 4 were good. One bakery is in good condition. Of 3 restaurants, that of John Guinon was excellent, 1 was fair and 1 poor, being in an unclean condition.

North Vernon, Jennings County: Twelve groceries were inspected, 5 were good, 5 were fair and 2 were poor, being in an unsanitary condition. Four slaughter houses were inspected, 1 was fair and 3 were in poor condition. Ten days' notice was given to drain properly, screen and whitewash. Four meat markets were inspected, 3 were fair and 1 was in a bad condition; the refrigerator was foul and the general condition was somewhat dirty. Of 5 drug stores, 4 were good, 1 was poor, the goods were not clean and up to date, and the store was not well lighted and ventilated or kept clean. Of 2 bakeries, 1 was good and 1 was fair. Eleven hotels and restaurants were inspected. The German Hotel was in excellent condition, 3 were good, 2 were fair, 3 were poor and 2 were bad; the dishes were not washed and rinsed properly and the employes were not neat. One canning factory was in poor condition, the floor was open and an open ditch was the only means of drainage. One creamery was found to be in fair condition.

Oakland City, Gibson County: Six groceries were visited. That owned by A. Deutsch & Bro. was in excellent condition, 1 was good, and 4 were in a fair condition. Four were unclean, and 1 was badly lighted and ventilated. Three meat markets were inspected; 1 was in good condition, and 2 were fair, being unclean. Of 4 drug stores inspected, 3 were in good condition, and 1 was fair. One bakery and 1 ice cream stand were inspected and were in a fair and poor condition respectively. Five hotels and restaurants were inspected; 4 were in good condition, and 1 was fair, being unclean. Four poultry houses were inspected; 2 were found to be in fair condition, and 2 were in poor condition.

Orangeville, Orange County: One grocery was inspected and found in good condition.

Orleans, Orange County: Four groceries were inspected; Hollowell Bros.' grocery and meat market was in excellent condition, 2 were good and 1 was poor, having dirty refrigerator and back shop. Six meat markets and slaughter houses were inspected; 3 slaughter houses were in poor condition and were given two weeks to make their places sanitary; 2 were good and 1 was fair. One drug store was good and 1 fair. One bakery was in fair condition. Five hotels and restaurants were visited, 2 were good and 3 were fair, the kitchen not being well ventilated and lighted.

Osgood, Ripley County: Three groceries were found to be in an excellent, good and fair condition. That of McCoy & Bovard was in excellent condition. Of 4 meat markets and slaughter houses, 3 were in good condition and 1 was poor, the floor was open, there were no screens and the place was not whitewashed and kept in a sanitary condition. Ten days' notice to comply with orders was given. Three drug stores were in good condition. Three bakeries and confectioneries were inspected, 2 were good and 1 was poor, the employes were not clean and tidy and the goods were not properly handled. One hotel was in good shape and 1 restaurant was fairly clean. Fifty-five bottles of extract were condemned as being old stock.

Otisco, Clark County: Three groceries inspected. Two were poor and 1 was fair. Two were unsanitary. One canning factory was in fairly good shape.

Owensville, Gibson County: Two groceries were inspected; 1 was good and 1 was fair. Three hundred and sixty-six bottles of extract, 12 cans of potted ham, 17 cans of veal loaf and 4 cans of roast beef were condemned. Four meat markets and slaughter houses were inspected, 2 were good, 1 was fair and 1 was poor. Ten days' notice to comply with orders was given. Two drug stores were in good condition. Four hotels and restaurants were inspected, 1 was good and 3 were fairly clean.

Palmyra, Harrison County: The Silver Lake Creamery Company was found to be in excellent condition. Two groceries were in a good and fair condition. One confectionery was in a fair condition and 1 hotel was in good condition.

Paoli, Orange County: Three dairies were inspected. The Lost River Dairy was in excellent condition. The Paoli Creamery Company was in excellent condition, 1 dairy was good. Seven groceries were inspected; the store of L. H. Buskirk & Bro. was in excellent condition, 5 were good and 1 was fair. One meat market was good. Three drug stores were inspected; the drug store of S.

F. Teaford is in excellent condition, 2 were classed good. Five hotels and restaurants were inspected; 3 were good and 2 fair. One slaughter house was inspected and was found to be in poor shape. Ten days' notice was given to repair the old building or 30 days to build a new one. Instructions were given how to build a sanitary slaughter house.

Peru, Miami County: Four dairies were inspected and were found to be in a fair and poor condition. Of 16 groceries inspected, that owned by McCaffery & Company was in excellent condition, 13 were good and 2 were fair, being unclean. Of 14 slaughter houses and meat markets visited, those of McCaffery & Company and J. W. Miller were found to be in excellent condition, 10 were good, 1 was poor and 1 was bad. One slaughter house was condemned. Six drug stores were inspected; those of R. E. Murphy and H. F. Miller were in excellent condition; 4 were in good condition. Nine bakeries and confectioneries were visited; James Dickman's confectionery, and Mercer & Company's bakery were in excellent condition, 6 were good and 1 was fair. One ice cream factory and 1 canning factory were in good condition. Ten hotels and restaurants were visited; 8 were in good condition and 2 were fairly clean. One brewery was in good condition.

Petersburg, Pike County: Six groceries were visited; 2 were in good condition, and 4 were fair. Two slaughter houses were inspected, 1 was good, and 1 fair. Four drug stores were inspected, 1 was good and 3 were fair. The bakeries and candy shops were visited; 2 were good and 1 was fair. Four hotels and restaurants were inspected; 1 was good and 3 were fair. One poultry house was in a fair condition.

Pittsburg, Carroll County: One dairy was inspected and was found to be in a bad condition; orders were given to put the place in a sanitary condition. One confectionery was in fair condition. Two grocery stores were in fair condition and 2 meat markets were in poor condition. The garbage was not removed daily in a number of places visited, the floors, walls and counters were unclean. Twenty pounds of meat were condemned.

Plainfield, Hendricks County: Five groceries were inspected, Reagan and Carter's grocery was found to be in excellent condition, 1 was good, 2 were fair and 1 was poor, having a foul refrigerator. Four were unclean. Eight slaughter houses and meat markets were visited, 4 were good, 2 were fair and 2 were bad, being in an unsanitary condition. Of 6 drug stores visited, the Plainfield Drug Company was found to be in excellent condition, 1

was good, 3 were fair and 1 was poor, there being much old stock and the store not being kept in an orderly manner. Orders were left to renovate stock and clean up. Two bakeries were visited, 1 was poor and 1 was fairly clean. Orders were given to clean up and whitewash. Of 5 hotels and restaurants visited, that of Sanders Smith was in excellent condition, while 2 were good and 2 were fair.

Plymouth, Marshall County: Twenty-eight inspections were made. Schlosser Brothers' Creamery was in excellent condition. Three bakeries and confectioneries were in good condition. Of 9 hotels and restaurants, that of Mrs. Strang was found to be in excellent shape. 7 were good and 1 was fair. Four drug stores were inspected, J. W. Rinard's was in excellent condition, 3 were good. Of 7 groceries inspected, the following were excellent: F. A. Jacon and Frank Vangilder, 4 were good and 1 was fair, due to unclean refrigerator and back shop. Of 4 meat markets visited, the following 2 were excellent: Fred H. Kuhn and J. Swindell & Brother, dealers in poultry and eggs.

Poseyville, Posey County: Four groceries were visited, 2 were good, 1 was fair and 1 was poor, the floor, walls, ceiling, shelves and counters being unclean. Twelve packages of halibut, 26 bottles of extract, 15 bottles of catsup, 12 cans of meat and 24 jars of jelly were condemned. One meat market was in good shape. One slaughter house was in bad shape and they were given ten days' notice to comply with orders and put place in a sanitary condition or quit business. One drug store was in good shape. Two restaurants were fairly clean, having dirty walls and ceilings, shelves and tables.

Princeton, Gibson County: Nine groceries were inspected. Riggs' Spot Cash Grocery was found to be in excellent condition, 7 were good and 1 was poor, being unclean. One hundred and seventy-one cans of meat, 149 bottles of extract and 24 quarts of maple syrup were condemned. Six meat markets and slaughter houses were visited, 1 was good, 2 were fair and 3 were poor. Thirty days were given to comply with orders. Of 5 drug stores visited, 4 were good and 1 was fair. Six bakeries and candy shops were inspected, 3 were good, 2 were fair and 1 was poor. Four restaurants were visited, 2 were good, 1 was fair and 1 was poor, not being well lighted and clean. One canning factory was in fair shape.

Rego, Orange County: One grocery was inspected and found to be in good condition.

Richmond, Wayne County: Nine groceries were inspected; 8 were good and 1 was fair. Eight meat markets and slaughter houses were inspected; 3 were good, 3 fair and 2 were bad and were condemned. Five pounds of old meat were condemned. Nine drug stores were visited; 6 were good and 3 in a fair condition. Three bakeries were visited; 2 were in good condition and 1 was poor, having foul refrigerator, unclean floor, walls, etc. Five hotels were inspected; 2 were classed good, 2 poor and 1 fair.

Roachdale, Putnam County: Three groceries were inspected; 2 were good and 1 was in fair condition. Four meat markets and slaughter houses were inspected; 1 was good, 2 were fair, and 1 was in poor condition. Two were unclean, and 1 slaughter house was condemned. One drug store was inspected and was in a poor condition; the goods were not clean and up-to-date and the clerks were not clean and tidy. One confectionery was in good condition. Two restaurants were inspected; 1 was in good condition, and 1 was fair, the employes were not neat and the shelves, tables, sinks, etc., were unclean.

Rochester, Fulton County: One dairy was inspected and was found to be in poor condition. The building is old and the only means of ventilation is by doors and cracks. Two groceries, 2 restaurants and 1 bakery were in good condition. Of 6 meat markets and slaughter houses, 3 were good and 3 were bad, and were condemned as food producing establishments. Two drug stores were inspected; that of Geo. V. Dawson was in excellent condition, while the other one was fair. The floor was not clean and the fountain was unsanitary. One creamery was inspected and was found to be in good condition.

Rockport, Spencer County: Seven groceries were inspected; 4 were good and 3 were fair, 2 had foul refrigerators, and 1 was unclean. Three meat markets and slaughter houses were visited; 2 were in good condition, and 1 was fair. Three drug stores were inspected; that of T. C. Basye was in excellent condition, 2 were in good condition. Two confectioneries and 1 ice cream parlor were visited; 1 was in good condition, and 2 were fair. Of 6 hotels and restaurants visited, 4 were fair, 1 was poor, and 1 was in bad condition, due to foul refrigerators and general uncleanliness.

Rockville, Parke County: Four groceries were visited. One was good, 2 were fair and 1 was poor. Three were unclean. Two meat markets were in fair condition; both were unclean, and forty-three pounds of preservatives were condemned. Of 4 drug stores inspected, 3 were good and 1 was fair. The fountain was not sani-

tary and the goods were not clean and up-to-date. One bakery was in good condition. One confectionery was in fair condition, and notice was given to clean fountain and the premises in general. Five hotels and restaurants were visited. One was good, 3 were fair and 1 was poor. Four were unclean and 3 had foul refrigerators. Notice was given to clean kitchen and back yard.

Rushville, Rush County: Five groceries were inspected and all found to be in good condition. One meat market and 3 drug stores were in good condition. One bakery was in poor condition, being badly lighted and ventilated and unclean.

Salem, Washington County: One creamery was examined and found to be in a fair condition. Nine groceries were visited; 5 were good and 4 were fair. Four meat markets were visited; 2 were found to be in good condition and 2 were in a fair condition. Four drug stores were inspected; H. C. Hobbs' drug store was in excellent condition, 2 were in good condition and 1 was fair. One bakery was in fair condition. Seven hotels and restaurants were inspected; 3 were in good condition, 2 were fair and 2 were in a poor condition, having dirty floors and dirty walls and untidy employees.

Scottsburg, Scott County: Ten groceries were inspected. Three were good, 6 were fair and 1 was poor. Two were unclean. Three meat markets and slaughter houses were inspected, and all were in a fair condition. Three drug stores were in fair condition. In one the back room of shop was unclean, and in the other the fountain was not sanitary and the prescription counter was unclean. Three bakeries and confectioneries were inspected, and two were found to be in fair condition, while the third was in a bad condition, and if a new place is not built in six months the place will be condemned. Three restaurants were visited. Two were fair and 1 was poor. Two were unclean and 1 did not have efficient ventilation and light. Two canning factories were in fair condition, the drainage was bad and the floors were open.

Sellersburg, Clark County: Two groceries were inspected and found to be in good condition. Three meat markets were in fair condition. The drainage in the slaughter house was ordered to be made more effective, the floors to be kept better, the tank to be removed in a room separate from the rendering room and effective screens. One drug store was in good shape. One confectionery was in a bad shape and was ordered to be cleaned up at once. One canning factory was visited and was found to be in a poor condition, due to the dirty floors, lack of drainage, etc. Orders were left to better conditions at once.

Seymour, Jackson County: Twelve groceries were visited, of which the Model Grocery was rated as excellent, 3 were good, 7 fair and 1 was poor, having unclean back shop and cellar. Twelve meat markets and slaughter houses were inspected; 2 were in good condition, 7 were fair and 3 were in a bad condition and were condemned. Five drug stores were in good condition. Four bakeries and candy shops were inspected; 2 were in good condition and 2 were in fair condition. Six hotels and restaurants were inspected; 4 were in good condition and 2 were in fair condition. One dead animal contractor was given notice to eliminate offensive odors.

Shelbyville, Shelby County: Two dairies were visited and were found to be in fair and poor condition due to uncleanliness. Of 16 groceries visited, 5 were in good condition, 9 were fair and 2 were poor, being dirty and having an unsanitary refrigerator. Screens were not provided for doors and windows, and the back shops were unclean. Two stores were not well lighted or ventilated. Six meat markets and slaughter houses were inspected, 2 were good, 3 were fair and 1 was poor. Orders were left to clean out cistern, drain, make floor tight and clean up the premises. Eleven drug stores were inspected; that of Robert W. Buxton was in excellent shape, 7 were good and 3 were fair, the shelves, counters and back shops being somewhat dirty. Of 11 bakery and confectionery shops, 3 were good and 8 were fair. The pastry was ordered to be covered. Of 6 hotels and restaurants visited, 1 was good, 3 were fair and 1 was poor, as there is only a board partition part way to the ceiling between the store and the living room. Four restaurants were unclean, 3 were badly ventilated and 2 were not well lighted.

Shoals, Martin County: Of 11 groceries inspected, 2 were good, 8 were fair, and 1 was in poor condition, having a foul refrigerator and being unclean. Two drug stores were inspected; 1 was fair and 1 was poor. One bakery was in good condition. Three restaurants were inspected; 2 were fair, and 1 was poor.

South Bend, St. Joseph County: Five groceries were in good condition. Eight meat markets and slaughter houses were inspected. That of James A. Collard was in excellent condition, 4 were good, two were fair and 1 was poor, the premises being in an unsanitary condition. Ten confectioneries and bakeries were inspected. The Philadelphia Restaurant Company was in excellent condition, as they had a clean soda fountain, ice cream factory and candy factory. Charles Gromi's confectionery and ice cream factory, which is in the basement, was in excellent condition, 5 were

good and 3 were fair; there were no screens and the flies were plentiful. Seven hotels and restaurants were inspected. Kables and M. F. Calnon were in excellent shape, while 3 were good and 2 were fair, 1 was unclean, and 1 had a foul refrigerator. The Armour cold storage was in excellent condition, while the other one inspected was good.

Stewartsville, Posey County: Three groceries were inspected, 2 were good and 1 was fair. Eighteen bottles of extract were condemned.

Stinesville, Monroe County: Two groceries were visited; 1 was good and 1 was in fair condition.

Sullivan, Sullivan County: Two dairies were inspected and were found to be in bad condition. Ten gallons of milk were condemned. Nine groceries were visited; 6 were good, and 3 were fair, being unclean. Eight meat markets and slaughter houses were inspected; 3 were good, 2 fair, 2 poor, and 1 was in a bad condition. One thousand three hundred and fifty-five pounds of meat were condemned, including a tuberculous hog which had been prepared for market. Four drug stores were inspected; 2 were good, and 2 were in a fair condition. One-half gallon fountain syrup, which had fermented, was condemned in a confectionery, which was classed as being in a fair condition, 1 confectionery and 1 bakery were in good condition. Five hotels and restaurants were inspected; 1 was good, 1 fair, 1 poor, and 2 were bad. Four were very unclean and the employes were not neat. One ice cream factory and one bottling works were in good condition.

Summitville, Madison County: One confectionery, one bakery and two drug stores were in good condition. Five groceries were inspected; 3 were good and 2 were fair. Three meat markets and slaughter houses were visited; 1 was good and three were in fair condition, all being unclean. Two restaurants were in good and fair condition; the garbage was not removed daily.

Swayzee, Grant County: Three drug stores and one hotel were in good condition. Two groceries were in good and fair condition and 2 meat markets and slaughter houses were in good and fair condition; the premises about the slaughter house were not clean and sanitary.

Switz City, Greene County: Two groceries were inspected; one was poor and 1 fair, due to the unclean floors, refrigerators and back shops. One meat market was in fair condition. The meat not being of good quality, 45 pounds were condemned. One drug store was inspected and was in fair condition. The prescription

counter and back shop were not clean. Three hotels and restaurants were visited; 2 were in fair condition and one was in a poor condition. In all three the shelves, tables, sinks, walls and ceilings were unclean.

Tell City, Perry County: Twelve groceries were inspected; 5 were good, 5 fair, and 2 were poor, being unclean. Ten meat markets and slaughter houses were visited; the inspector found 2 good, 5 fair, and 3 poor. Three were unclean, and 2 had foul refrigerators. Three drug stores were in good condition. Four bakeries and candy shops were inspected; 3 were in good condition, and 1 was poor. Four hotels and restaurants were visited; the Commercial Hotel was found to be in excellent condition, three were in fair condition, not being well ventilated, well lighted or clean. One bottling works and 1 canning factory were in fair condition. Three breweries were inspected; 2 were in good condition, and 1 was fairly clean.

Terre Haute, Vigo County: Seven dairies were inspected, of which 1 was good, 5 fair and 1 poor. The general condition as to cleanliness was fair. Thirty-two groceries were visited; 7 were good, 19 fair, 5 poor and 1 bad, having a foul refrigerator and an untidy back yard and back room of shop. Of 25 meat markets, 2 were good, 16 fair, 5 poor and 2 bad. Many orders were given to proprietors to have their places put in a sanitary condition. Eighteen drug stores were inspected. The Buntin Drug Co. was in excellent condition, 9 were good, 7 fair and 1 was poor, but the proprietor is soon to move into a new place. Four bottling works, one coca cola works and one winery were inspected; 3 were good, 2 fair and 1 poor. Twenty-six ice cream manufactories, bakeries and confectioneries were inspected. The ice cream parlor owned by Peter Georgopoulos was in excellent condition, 12 were good, 8 fair, 4 poor and 1 bad; this bakery had dirty floors, walls, tables, shelves and sinks and was not well ventilated or lighted. Fifteen hotels and restaurants were visited; 3 were good, 6 fair, 6 poor. Three restaurants had foul refrigerators and the employes were not neat. Thirty pounds of meat were condemned.

Thorntown, Boone County: One dairy was inspected and found to be in fair condition; the means of ventilation was fair and means of drainage bad. Six groceries were inspected; the grocery owned by Ben Honecker was in excellent shape, the other 5 were good. Three meat markets were inspected; that owned by Jaques & Crouch was in excellent condition, the other 2 were good. Three drug stores were visited; W. C. Burk's drug store was in excel-

lent condition, 1 was good and one was fairly clean. Three bakeries and candy shops and three hotels and restaurants were good and fair. The general conditions were very good.

Tipton, Tipton County: Of fifteen groceries inspected, 7 were in good condition, 6 were fair and two were poor, due to unclean shelves, counters and back shops. Three had foul refrigerators. Seventeen slaughter houses and meat markets were visited; that owned by Ray Moore was in excellent condition; 3 were good, 9 were fair and 4 were in poor condition. One meat market had a foul refrigerator and the other had an unclean meat block, while another had a bad floor. Twenty pounds of meat and 35 pounds of fish were condemned. Three slaughter houses were condemned until put in better condition. Of 7 drug stores inspected, that of the Red Cross Drug Company was in excellent shape, 2 were good, 3 were fair and 1 was poor on account of the general unclean conditions. Of 6 bakeries inspected, 2 were good, 3 were fair and 1 was poor, being unclean. Orders were given to clean up and paint. Eleven restaurants and hotels were visited; 4 were good, 4 were fair and three were in a poor condition, having foul refrigerators and unclean floors. One had spider webs and paper hanging from the walls and ceilings. One sewage outlet was found to be stopped up. One canning factory was in good shape.

Underwood, Clark County: One canning factory was inspected and found to be in poor condition. The drainage was fair, the condition under the floor was bad and the floor had holes in it. Notice was given to improve the sanitary conditions at once.

Union City, Randolph County: Eight groceries were inspected; those of C. J. Turpen, and Platt & Son were excellent; 6 were good. Three meat markets were inspected; that of Veil Bros. was excellent, 1 was good, and 1 was fair. Of 5 drug stores inspected, that of James E. Stewart was excellent; 2 were good, and 2 were fair. Five ice cream parlors and 3 restaurants were in good condition.

Upland, Grant County: Of 4 groceries visited, 3 were in good condition and 1 was fair. One meat market and 1 slaughter house were fairly sanitary. One drug store was in good condition and 1 was fair, the shelves, counters and back shop were unclean. One bakery was in fair shape. Two restaurants were visited; 1 was good and 1 was found to be in a fair condition, due to poor ventilation, poor light and an unclean refrigerator.

Valeene, Orange County: Two groceries were inspected; 1 was good and 1 was poor, the floor, shelves and counters were unclean

and the store was not well ventilated and lighted. One drug store was in poor condition, the goods were not clean and up-to-date and the store was badly lighted and ventilated.

Van Buren, Grant County: Five groceries were visited and all were in good condition. Two meat markets and one slaughter house were found to be in fair condition only. Ten pounds of beef were condemned. The premises about the slaughter house were not clean and sanitary. The back rooms of the meat markets were not clean and tidy. One bakery was in fair condition.

Veedersburg, Fountain County: Seven groceries were inspected; 6 were fair, and 1 was poor. Five were unclean, and 3 had foul refrigerators. Two meat markets were found to be in fair condition due to dirty refrigerators and floors. Of 3 drug stores inspected, 1 was good, and 2 were in fair condition. Two fountains were unsanitary. One confectionery and 1 bakery were inspected and found to be in poor condition, being unclean. Two restaurants and 1 hotel were inspected and found to be in fair condition. All three were unclean; 2 were poorly lighted and ventilated, and one had a foul refrigerator.

Vincennes, Knox County: Twenty-two groceries were inspected; 6 were good, 16 fair, and 3 were in poor condition. Nine meat markets and slaughter houses were visited; 2 were good, 4 fair, and 3 were poor. Of 10 drug stores, that of Moore & Miller was excellent; 2 were good, and 7 were fair. Three were unclean. Nine bakeries and candy shops were visited; 4 were good, 4 fair, and 1 was poor. Of 15 hotels and restaurants inspected, 1 was good, 5 were fair, 8 were poor, and 1 was bad. Five were unclean, 2 had foul refrigerators, and 3 were poorly ventilated and lighted. One bottling works was inspected and was found to be in fair condition.

Wabash, Wabash County: Seven groceries were visited, and 6 were in good shape, while 1 was in fair condition, not being well lighted or ventilated. Baker's meat market was in excellent condition. Two others were found to be in good shape.

Walton, Cass County: The restaurant and grocery owned by M. Ruth was in excellent condition. Three meat markets were inspected; 2 were in good and 1 was in fair condition. One bakery and 1 restaurant were in good condition.

Washington, Daviess County: Twenty groceries were inspected. The meat markets and grocery stores owned by Cabel and Kauffman and H. F. Vollmer were in excellent condition. Mr. Vollmer has hide room in department store, renders lard, makes sausage, has poultry house in same building; there is no smell from any quarter;

the floors are cement, the drainage is good and scrubbing is done every night by a trained corps; 4 were good and 14 fair. Eleven meat markets and slaughter houses were visited; 2, above referred to, were excellent, 4 good and 5 fair. Ten drug stores were inspected; 9 were good and 1 was fair. Seven bakeries and confectioneries were inspected; Chas. H. Jones' candy kitchen was in excellent condition; 2 were good and 4 were fair. Four restaurants were visited; 3 were fair and 1 was poor, on account of general uncleanly conditions. One poultry house was visited and was ordered to be put in a sanitary condition. One canning factory was in fair condition; no screens were provided.

West Baden, Orange County: Three groceries were visited, of which 2 were in good condition and 1 was in a fair condition, the back shop being dirty. One meat market was in good condition. Four drug stores were inspected; the West Baden Drug Company and the Pera Palace Drug Company were in excellent condition, 1 was in fair condition and 1 was in poor condition, being poorly ventilated and lighted and the cellar unclean. Nine hotels and restaurants were inspected. The new Hotel Sutton was in excellent condition. Three were in good condition, 3 fair and 2 poor, being unsanitary.

Whitestown, Boone County: Six groceries were inspected; 2 were good and 4 were in fair condition, having dirty back shops. Two meat markets were in good condition. One drug store was found to be in good condition and 1 restaurant was in fair condition, having unclean walls and ceilings but being badly ventilated and lighted.

Whiting, Lake County: Seven groceries were visited and 5 were found to be in good condition, while 2 were only in fair condition. Three meat markets and 1 drug store were in good condition. Two confectioneries and 1 bakery were visited. The confectioneries were in good condition, while the bakery was in poor condition, due to the dirty floor, walls and ceiling, table, bins and shelves. Two restaurants were inspected; 1 was good and 1 was poor.

Williamsport, Warren County: One dairy was inspected and found to be in poor condition. Orders were given to clean up, fix drain, etc. Five groceries were visited; 3 were good and 2 were fair. Five meat markets were inspected; 1 was good, 3 were fair, and 1 was bad. The garbage was not removed daily, 2 were unclean and two had foul refrigerators. Four drug stores were inspected; the one owned by A. B. Donovan was in excellent condition, 1 was good, 1 was fair and 1 was poor, the back store and back

yard were in bad shape, and the goods were not clean and up-to-date. Orders were left to put premises in a sanitary condition. Three bakeries were found to be in good sanitary condition. Of 6 restaurants visited, 2 were good and 4 were fair. In 1 the kitchen was not well lighted and ventilated, the shelves, tables, sinks, etc., were not clean, and in the other restaurants the garbage was not removed daily, the refrigerator was unclean and the employes were not neat.

Windfall, Tipton County: Four groceries were inspected. Two were found to be in good sanitary shape and 2 were fair, due to uncleanliness. One meat market was in good condition. Two drug stores were in good shape, except some patents were not properly labeled. Two bakeries were in good condition. Two restaurants were fairly clean, notice was given to clean up and paint. One canning factory was in good shape, notice was given to keep things clean.

Worthington, Greene County: Twenty first inspections and 12 second inspections were made. Of 13 groceries visited, that of Cooper & Hansford was in excellent condition, 6 were good and 6 were fair, the refrigerators, shelves and counters were unclean. Of 13 meat markets and slaughter houses, 5 were good, 5 were fair, having unclean meat blocks and refrigerators; 1 was poor and 2 were bad. The latter two slaughter houses were condemned and a satisfactory arrangement was made whereby all can use one good slaughter house. Five drug stores were inspected, that of Cooper & Son was found to be in excellent shape, 2 were good and 2 were fair, the goods not being clean and up-to-date. Two restaurants were visited and were found to be in fair condition.

Zionsville, Boone County: One restaurant and 1 drug store were in good condition. Two meat markets were in fair condition. Of 2 groceries inspected, 1 was good and 1 was fair, having a dirty refrigerator and back shop.

THE WATER SUPPLY OF INDIANA.

During the year ending October 31, 1907, 621 samples of water were analyzed; 221 samples were deep well waters, the waters coming from below an impervious strata; 257 samples were from shallow wells and were supposedly surface waters; 67 samples were stream supplies; 18 lakes or ponds; 23 springs and 18 cisterns. In addition to this work 12 sewage effluents were analyzed and three samples of distilled waters. Of the deep well supplies 141 were of good quality; 25 were so polluted as to be classed as bad, and 55 were of doubtful quality, that is, they contain certain chemical characteristics indicating pollution, but at the present time their condition is not so serious that they are unfit for use. Of the 257 shallow wells examined, 79 were of good quality; 134 unqualifiedly bad; 44 supplies were of doubtful quality. Since a shallow well water of doubtful quality is sure sooner or later to become more seriously polluted and pass into the class of bad waters, the doubtful and bad samples may be placed together. We find then that 178 or 69 per cent. of the well waters examined must be classed as unsatisfactory water for drinking and domestic purposes. Thirty-nine stream supplies were good; 9 bad and 21 doubtful. Twelve pond or lake supplies were examined and 6 were of doubtful quality. No waters of this class showed sufficient evidence of pollution to be classed as bad. Of the 23 spring supplies 11 were good; 5 bad and 7 doubtful. It is evident from the results obtained that many waters are classed as spring supplies when as a matter of fact they are but surface waters usually rising from some fault in the upper geological formations.

Another classification may be made of the work according to the ownership of the sources of supply. One hundred and two analyses were made from water from the public supplies classified as follows: 73 deep wells, 8 shallow wells, 51 river, 5 pond and 5 springs. Of the deep well supplies 39 were of good quality, none were bad and 34 were classed as doubtful. The large number of deep well waters classed as doubtful is explained by the fact that a series of analyses was made on water from the Noblesville deep wells and in every case the supply proved to be of doubtful quality. The deep well waters used as public supplies are, for the most part, of excellent

quality from a sanitary standpoint. The 8 shallow well waters examined were all Court House wells or wells near the street curb. Four were good, 3 doubtful and 1 bad. No shallow well should be used as a public supply. Of the 51 river supplies, 36 were of good quality, 9 doubtful and 6 bad. Many of these samples taken from the Ohio River in an unfiltered state, can never be classed as a good water. Of the private supplies 148 were deep wells, 249 shallow wells, 18 rivers, 13 ponds, 18 springs and 18 cistern waters. One hundred and two of the deep well waters were good, 21 doubtful and 25 bad. The deep well water is the safest source for the private supply and when the well is properly driven, carefully cased and located where no surface pollution can reach it, it is sure to supply a safe water. One hundred and thirty-three samples from shallow wells were bad, 41 doubtful and 75 good. The shallow well is never a safe source of water for drinking and domestic purposes except when located on an uninhabited area, and far removed from all sources of pollution. All shallow wells situated within town limits, or wherever the population is more congested than one family to the acre, cannot remain pure and wholesome. The study of the public water supplies of the State has been continued, and in the following report the chemical analyses of all public waters are tabulated, the results including those reported during the year 1906, as well as the figures obtained by more recent analyses.

ADAMS COUNTY.

There are no public supplies in this county. One private supply was found to be of fair quality.

ALLEN COUNTY.

Fort Wayne.—In 1879 this city built its own water supply, which comes from bored wells. The reservoir has a capacity of 3,000,000 gallons; 100 miles of distributing mains are in use and 3,500,000 gallons are used per day; 10,000 taps in city.

BARTHOLOMEW COUNTY.

Columbus.—The water system was built in 1870 by the city, and supply is taken from East Fork of White River below the junction of Flat Rock and Driftwood Fork. Gallery wells extend diagonally across the river. Sewage enters river just below the intake of the water supply. The supply is insufficient and must soon be increased. The water for drinking purposes is generally taken from

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF FT. WAYNE PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.		Total.	Fixed.		
291	April 20, 1906.	None.	0.0	V. s.	V. s.	.0200	.0044	.0100	.0000	.70	33.0	30.0	14.0	.04
292	April 20, 1906.	None.	0.0	V. s.	V. s.	.0200	.0038	.0100	.0000	1.20	47.8	44.0	14.8	.035
327	May 17, 1906.	None.	0.0	Much.	S. reddish.	.0120	.0028	.0100	.0004	2.2	62.6	50.7	15.8	.04
588	Sept. 15, 1906.	None.	5—	V. s.	S. flocc.	.0000	.0080	.0000	.0005	2.6	68.8	54.8	26.4	.03
589	Sept. 15, 1906.	None.	0.0	None.	V. s.	.0044	.0080	.0000	.0003	2.6	66.0	54.3	27.2	.00
802	Nov. 27, 1906.	None.	0.0	V. s.	S. reddish.	.0110	.0000	.0400	.0000	1.2	47.2	35.4	27.4	.03
803	Dec. 1, 1906.	None.	0.0	Much.	Much.	.0250	.0040	.0000	.0000	5.6	73.6	57.4	28.4	.07
943	Mar. 20, 1907.	None.	0.0	V. s.	S. reddish.	.0130	.0044	.0100	.0080	3.9	64.0	51.4	30.2	.02
1069	July 8, 1907.	Sl.	0.0	None.	Con. reddish.	.0000	.0030	.0000	.0000	2.0	62.6	49.2	30.5	.01
1060	July 8, 1907.	None.	0.0	None.	Con. reddish.	.0120	.0068	.0000	.0001	1.0	43.4	34.0	28.2	.04
1162	Aug. 14, 1907.	None.	0.0	S.	S. reddish.	.0120	.0010	.0000	.0004	1.0	46.4	37.0	26.5	.04
1178	Aug. 16, 1907.	None.	1.9	M.	Con. reddish.	.0190	.0020	.0000	.0001	4.3	72.0	60.0	33.6	.10
1374	Nov. 6, 1907.	None.	4.0	High.	Floc. iron.	.0350	.0126	.0150	.0000	3.35	65.0	56.0	29.0	.14
1375	Nov. 6, 1907.	None.	15.0	S.	Floc. iron.	.0120	.0086	.0150	.0008	1.30	50.8	44.8	36.4	.06

private wells. One analysis has been made of this supply, and the water found to contain no abnormal characteristics. Gas forming bacteria were present, a not unusual characteristic of river water. Seven private supplies were examined and six of these were not suitable for drinking purposes.

Elizabethtown.—No public supply. Four private supplies were examined, one of which was of fair quality, two were of doubtful character, and one was badly polluted.

Hope.—No public supply. Two private well waters were examined, neither of which were suitable for drinking purposes.

BENTON COUNTY.

Boswell.—Two town wells. Water from four private wells examined shows two to be badly polluted, and two to be of good quality.

Fowler.—Supply built for Fowler in 1895, but is now under private control. Four deep driven wells furnish the supply. Practically no private wells are in the town.

Oxford.—The public supply of three driven wells is leased by the town. One private supply was examined and was found to be a good water.

BLACKFORD COUNTY.

Hartford City.—The public supply was built in 1894 and is owned by the city. The water is obtained from seven driven wells, and the daily consumption of same is about 400,000 gallons.

BOONE COUNTY.

Jamestown.—No public supply. Two samples from private wells have been examined and found to be of fair quality.

Lebanon.—The water supply of this town was built in 1894 and is taken from deep wells. The water is pumped to a standpipe, and about 300,000 gallons per day are used. Water from one private well was found to be of good quality.

Thorntown.—No public supply. The one sample examined was found to be unfit for use.

Zionsville.—No public supply. Three well waters examined showed one to be good and two to be polluted.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF HARTFORD CITY PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albuminoid.	Nitrates.	Nitrites.		Total.	Fixed.		
1147	Aug. 10, 1907	None	0.0	None	None	.0420	.0038	.0800	.0000	.....	99.8	74.0	31.0	.08
1148	Aug. 10, 1907	None	0.0	Sl.	Con. reddish	.....	.....	.....	.....	.....	81.4	59.0	21.3	.04
1149	Aug. 10, 1907	None	0.0	Sl.	Con. reddish	.....	.....	.....	.....	.....	102.0	84.0	27.8	.60
1150	Aug. 10, 1907	None	0.0	Sl.	Con. reddish	.....	.....	.....	.....	.....	102.8	80.0	31.4	.06
1151	Aug. 10, 1907	None	0.0	None	V. s.	.....	.....	.....	.....	.....	104.0	75.4	33.3	.03
1152	Aug. 10, 1907	None	0.0	None	V. s.	.0416	.0060	.0000	.0001	.....	106.6	82.6	30.8	.16
1171	Aug. 14, 1907	None	0.0	Dec.	M. reddish	.0270	.0020	.0000	.0044	.....	101.4	83.6	30.6	Trace.
1261	Sept. 11, 1907	None	3.0	Much	Sl. floe.	.0180	.0500	.0000	.0001	.....	100.4	80.2	31.0	.105
1262	Sept. 11, 1907	Oily	4.0	V. much	Much red	.0280	.0040	.1000	.0000	.....	97.6	79.2	32.2	.20
1288	Sept. 19, 1907	None	6.0	Much	V. much red	.0070	.0014	.0000	.0060	.....	102.4	86.0	32.7	.06
1289	Sept. 19, 1907	None	4.0	Much	M. red floe.	.0080	.0034	.0000	.0060	.....	98.6	82.6	32.8	.05
1290	Sept. 19, 1907	None	6.0	Sl.	Much red	.0050	.0030	.0060	.0100	.....	96.2	79.8	23.9	.024

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF MONTEPELLIER PUBLIC SUPPLY.
Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Alb.-minoid.	Nitrates.	Nitrites.		Total.	Fixed.		
203	Feb. 5, 1906.	Oily.	0.0	V. mld.	V. mod. red.	.0040	.0080	.0010	.0000	23.9	101.2	90.8	15.6	.30
206	Feb. 12, 1906.	Brimstone.	0.0	V. s.	S. earthy.	.0040	.0060	.0150	.0010	21.9	108.8	91.5	15.6	.04
209	Feb. 19, 1906.	S. earthy.	0.0	S.	Mch. reddish.	.0060	.0064	.0000	Trace.	20.1	106.0	85.6	16.0	.14
217	Feb. 26, 1906.	Natural gas.	5 +	V. much.	V. much black.	.0120	.0044	.0050	.0008	20.9	99.5	80.0	11.2	.20
218	Feb. 26, 1906.	V. s.	5 —	Marked.	V. much red.	.0014	.0064	.0100	.0010	18.4	102.3	81.7	15.1	.30
226	April 3, 1906.	Oily.	5 —	V. mld.	Earthy.	.0010	.0114	.0400	.0004	13.8	83.5	70.4	12.8	.08
227	April 3, 1906.	Like gas.	5 —	V. mld, reddish.	‡ in black.	.0240	.0048	.0200	.0008	20.5	105.0	86.8	4.8	.14
238	April 3, 1906.	Oily or gassy.	5 —	V. mld, reddish.	‡ in black.	.0030	.0180	.0050	.0007	18.5	115.0	98.0	13.4	.04
301	April 30, 1906.	Oily or gassy.	0.0	Mld.	‡ in black.	.0040	.0048	.0200	.0020	18.0	87.2	75.2	9.0	.10
302	April 30, 1906.	Oily or gassy.	0.0	Mld.	‡ in black.	.0014	.0054	.0100	.0015	15.4	89.5	76.2	11.0	.14
364	May 26, 1906.	Oily.	0.0	V. s.	Ex. reddish.	.0012	.0028	.0050	.0007	14.4	101.4	80.7	16.2	.05
365	May 26, 1906.	Musty.	0.0	V. s.	S.	.0014	.0068	.0070	.0002	14.6	96.0	80.0	16.2	.08
366	May 26, 1906.	S. earthy.	0.0	V. s.	Mch. reddish.	.0080	.0038	.0010	.0010	14.3	96.4	80.0	15.1	.03
367	May 26, 1906.	Earthy.	0.0	S.	Consid. earthy.	.0160	.0028	.0060	.0008	14.5	94.2	75.0	13.8	.012

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF LEBANON PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Solids.		Hard-ness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.	Total.	Fixed.		
359	May 26, 1906.	Sl. foul.	5 —	Slight.	Exc. reddish floe.	.1300	.0128	.0100	.0000	53.8	43.7	23.2	.90
385	June 18, 1906.	Sl. foul.	0.0	Sl. floe.	Mch. reddish.	.0360	.0164	.0000	.0220	65.2	52.1	.....	1.0

CHEMICAL ANALYSIS OF WATER FROM PUBLIC WELL AT ZIONSVILLE.

Parts in 1000,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Solids.		Hard-ness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.	Total.	Fixed.		
197	Jan. 30, 1906.	None.	0.0	S.	V. s.	.0094	.0122	.0100	.0003	60.6	52.3	19.1	Trace.

BROWN COUNTY.

No public supplies.

CARROLL COUNTY.

Delphi.—This city owns its public water supply, which was built in 1902 and consists of water from three springs. The water is pumped to a standpipe and about 250,000 gallons are consumed daily. Water from two private supplies was examined and both found to be of good quality.

Pittsburg.—No public supply. Water from one well was analyzed and found to be of good quality.

CASS COUNTY.

Logansport.—In 1875 Logansport built its own water supply, which is taken from Eel River. There are also many private wells. Four of the private supplies which were examined were found to be as follows: Two badly polluted, one doubtful, and one fair.

CLARK COUNTY.

Borden.—No public supply. One sample analyzed was found to be of good quality.

Jeffersonville.—The Jeffersonville Water Supply Co. furnishes the supply for this city. It was built in 1887 and the water is taken from the Ohio River. About 1,000,000 gallons per day are used.

CLAY COUNTY.

Brazil.—The public supply is owned by the city and is taken from drilled wells. It is pumped into a reservoir and about 500,000 gallons per day are used. Fourteen private supplies have been examined. Of these five were polluted, five were of doubtful quality and four were suitable for drinking and domestic purposes.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF LOGANSPOUT PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Alburminoid.	Nitrates.	Nitrites.		Total.	Fixed.		
416	July 18, 1906.....	V. slight.....	0.0	Much.....	Mxd. red.....	.0230	.0046	.0000	.0003	7.8	51.7	39.0	15.1	.10
418†	July 18, 1906.....	Sl. earthy.....	0.0	V. slight.....	Mch. earthy.....	.0118	.0150	.0600	.0002	.3	36.4	28.9	11.4	.0000

†Not the same as 416

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF JEFFERSONVILLE PUBLIC SUPPLY.

Parts in 100 000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Alburminoid.	Nitrates.	Nitrites.		Total.	Fixed.		
413	July 18, 1906.....	Decidedly foul....	0.0	None.....	V. s. floe.....	.0120	.0024	.3000	.0020	2.5	65.0	49.5	19.0	.02

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF BRAZIL PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Alb. unbind.	Nitrate.	Nitrite.		Total.	Fixed.		
241	Feb. 26, 1906....	Slight.....	0.0	None.....	None.....	.0128	.0080	.0300	.0006	3.0	54.0	46.4	10.8	.02
242	Feb. 26, 1906....	Sl. earthy.....	5.0—	Slight.....	Sl. earthy.....	.0420	.0228	.0100	.0010	2.	61.3	51.6	3.2	Trace.
252	Feb. 31, 1906....	Earthy.....	0.0	V. al.....	V. al.....	.0090	.0044	.0400	.0013	2.40	59.10	49.2	10.0	.00
253	Feb. 31, 1906....	None.....	0.0	V. al.....	Sl.....	.0270	.0054	.0300	.0010	1.80	48.10	40.6	7.6	Trace.
254	Feb. 31, 1906....	None.....	0.0	V. al.....	V. al.....	.0290	.0046	.0200	.0080	1.80	61.30	49.3	10.4	.00
255	Feb. 31, 1906....	Veg.....	5.0	Consid.....	Cons. red.....	.0028	.0038	.0000	.0002	2.70	72.80	57.1	10.2	.100
595	Sept. 18, 1906....	None.....	0.0	Sl.....	Cons. earthy.....	.0000	.0024	.0200	.0000	4.6	82.0	62.0	25.4	.08
597	Sept. 18, 1906....	None.....	0.0	V. al.....	V. al. earthy.....	.0136	.0034	.0100	.0020	4.6	82.6	60.3	25.3	.04
598	Sept. 18, 1906....	None.....	0.0	V. al.....	V. al.....	.0130	.0068	.0100	.0015	4.5	80.9	60.3	25.2	.04
849	Jan. 16, 1907....	None.....	0.0	None.....	V. al.....	.0014	.0004	.1200	.0015	2.2	51.4	40.0	14.0	.00
1065	July 2, 1907....	None.....	0.0	None.....	V. al.....	.0010	.0194	.0000	.0001	3.7	70.0	54.6	36.0	.02
1067	July 2, 1907....	None.....	0.0	None.....	V. al.....	.0094	.0084	.0000	.0004	3.6	68.8	52.6	31.7	.02
1295	Sept. 20, 1907....	Sl. foul.....	6.0	Much.....	None.....	.0038	.0020	.0050	.0000	4.9	73.6	64.6	20.6	.016

CLINTON COUNTY.

Edna Mills.—No public supply. One private supply examined was found to be of good quality.

Frankfort.—The Frankfort Water Works Co. supplies this city with water from driven wells. The reservoir is filled by direct pressure and holds 300,000 gallons. The daily consumption is about 1,000,000 gallons. Water from a private well examined was found to be of fair quality.

Kirklin.—No water supply. Water from seven private wells has been analyzed and of this number four were of good quality, and three were polluted.

Rossville.—No public supply. Three private supplies examined showed one to be good and two to be of poor quality.

CRAWFORD COUNTY.

English.—The English Water Co. was built in 1895. The supply is taken from three springs, and about 1,500 gallons per day are used.

Leavenworth.—The Leavenworth Water Co. gets its supply from a bored well; the water is then pumped into a reservoir. The plant was established in 1896. About 2,700 gallons are used daily.

Marengo.—A company was established here in 1904 by the Grant & Davis Water Co. The supply is from a spring, and is pumped into a reservoir. About 6,000 gallons daily are consumed.

DAVISS COUNTY.

Elnora.—No public supply. Water analyzed from two private supplies was found to be of doubtful quality.

Montgomery.—Two public and private wells are the supply for this town.

Washington.—The City Water Co., established in 1887 by C. Gray, supplies this town. The water is pumped from a stream to a standpipe and about 1,500,000 gallons per day are used. Two private supplies were examined; one was found to be unsuitable for drinking purposes, and the other was of poor quality.

DEARBORN COUNTY.

Aurora.—A private company built in 1904 furnishes this city with its supply. The water is pumped from the Ohio River into a reservoir. The water is purified by filtration. About 150,000 gallons per day are used.

Lawrenceburg.—Driven wells are the only public supply in this town.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF GREENSBURG PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Alb.-minoid.	Nitrates.	Nitrites.		Total.	Fixed.		
103*	Nov. 10, 1905.....	Sl foul.....	30.	Slight.....	V. much flocc.....	.0218	.0220	.0150	.0002	9.6	83.1	70.4	.....	.2000
204	Feb. 12, 1906.....	None.....	0.0	None.....	M'kd. earthy.....	.0085	.0074	.0200	.0010	.40	29.2	22.5	11.5	Trace.

*Not same as 204.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF JASPER PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Alb.-minoid.	Nitrates.	Nitrites.		Total.	Fixed.		
421	July 18, 1906.....	V. slight.....	0.0	None.....	Sl. earthy.....	.0044	.0060	.0000	.0180	.2	34.4	27.0	14.0	Trace.
422	July 18, 1906.....	Sl. foul.....	0.0	Slight.....	Sl. earthy.....	.0034	.0138	.0500	.0000	.2	13.0	10.6	4.1	Trace.

DECATUR COUNTY.

Burney.—No public supply. Five private supplies were examined. Two were suitable for drinking purpose, and three were polluted.

Clarksburg.—No public supply. One private supply was examined and found to be badly polluted.

Greensburg.—The Greensburg Water Company, a private concern, supplies this town with its water, being established in 1889. The water is pumped direct from bored wells. About 400,000 gallons per day are used. One private supply was examined and found to be of very poor quality.

Letts.—No public supply. Water from one private well examined was found to be suitable for drinking.

New Point.—No public supply. One water examined was found to be of poor quality.

Sardinia.—No public supply. Four waters examined were all found to be potable.

St. Paul.—No public supply. Two private supplies examined were both badly polluted.

DEKALB COUNTY.

Auburn.—The supply for this city was built in 1898. The water is pumped from drilled wells direct into the mains. About 600,000 gallons daily are consumed. Three private supplies were examined and all were found to be of good quality.

Garrett.—In 1896 this city built its own water plant and gets its supply from bored wells. The water is pumped direct into the mains.

Waterloo.—The Waterloo Water and Light Company was built in 1902, the water being pumped from drilled wells into a reservoir. About 20,000 gallons are used per day.

DELAWARE COUNTY.

Albany.—The Albany Water and Light Company, using a system of drilled wells, supplies this city. The water is supplied by direct pressure.

Muncie.—The Muncie Water Works Company, a private concern, supplies this city. The water is taken from deep wells and White River and Buck Creek. About 3,500,000 gallons daily are used. The water from White River has an unpleasant taste of salt and oil. One analysis of this water has been made, and at that time, Septem-

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF ELKHART PUBLIC SUPPLY.
Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.		Solids.		Hardness.	Iron.
						Free.	Alb.-minoid.	Nitrates.	Nitrites.			Total.	Fixed.		
215	Feb. 26, 1906.	Sl. earthy.	5.—	None.	None.	.0060	.0164	.1000	.0010	.4		23.7	19.6	9.9	Trace.
225	Mar. 10, 1906.	None.	0.0	None.	V. sl. earthy.	.0038	.0188	.0800	.0017	.3.		24.5	20.2	9.5	Trace.
276	April 16, 1906.	Earthy.	.5	V. slight.	Sl. reddish.	.0010	.0054	.0100	.0015	.4		27.0	22.6	9.2	.04

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF GOSHEN PUBLIC SUPPLY.
Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.		Solids.		Hardness.	Iron.
						Free.	Alb.-minoid.	Nitrates.	Nitrites.			Total.	Fixed.		
472	Aug. 11, 1906.	V. sl. earthy.	0.0	Slight.	Consid. earthy.	.0064	.0088	.0400	.0040	.4		32.6	29.1	22.3	.015
473	Aug. 11, 1906.	Sl. earthy.	0.0	Slight.	Much earthy.	.0060	.0080	.0700	.0120	.2		31.1	25.5	21.1	.017

ber 16, 1907, the water was found to be potable. Samples from four private supplies were examined, three of which were found to be satisfactory and one was of poor quality.

Selma.—No public supply. One sample analyzed from a private well was found to be of fair quality.

Yorktown.—No public supply. Four private supplies were examined and from factors determined two were polluted and one was fair. Owing to smallness of samples, a satisfactory examination could not be made.

DUBOIS COUNTY.

Huntingburg.—A public supply was established by this city in 1893, which obtains the water from a pond covering 20 acres. The water is pumped to a standpipe, and about 170,000 gallons per day are used.

Jasper.—This town gets its water supply from the Patoka River. It is pumped into a reservoir.

ELKHART COUNTY.

Elkhart.—The Elkhart Water Company, a corporation mainly owned by Chicago capitalists, was built in 1884. The supply is from dug wells. About two-thirds of the population use this supply.

Goshen.—Goshen built its water supply in 1880. The water is pumped from wells to a standpipe, and about 3,000,000 gallons per day are used. Four private supplies examined proved to be potable.

New Paris.—No public supply. One private supply examined was of good quality.

Nappanee.—This town owns a bored well, the water from which is pumped into a tank. About 200,000 gallons per day are used.

FAYETTE COUNTY.

Connersville.—This city has a supply which was built in 1869. The water comes through a hydraulic canal fed by the west fork of Whitewater River, and is pumped from the canal into the mains. About 1,000,000 gallons per day are used. Ten private supplies have been examined. Eight of these waters were of good quality, and two were unsuitable for drinking purposes.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF CONNERSVILLE PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.		Solids.		Hard-ness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.			Total.	Fixed.		
90	Nov. 2, 1905.	S. earthy	.1	None	S.	.0010	.0080	.1500	.0006	.20		35.4	27.2		.048
89	Nov. 2, 1905.	S. earthy	.1	None	S.	.0026	.0086	.1200	.0010	.30		35.5	26.9		.00
1062	July 1, 1907.	S. earthy	0.0	V. S.	S. flocc.	.0040	.0094	.0700	.0010	.2		33.6	24.6	24.5	Trace.
1064	July 1, 1907.	None	0.0	V. S.	S.	.0000	.0080	.0100	.0004	1.2		53.0	40.4	33.3	.0040
1067	July 2, 1907.	None	0.0	None	None	.0014	.0124	.1500	.0004	.3		33.2	24.0	24.5	.0000

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF COVINGTON PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.		Solids.		Hard-ness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.			Total.	Fixed.		
208	Feb. 19, 1906.	None	0.0	None	V. s.	.0034	.0054	1.2	.00034	3.30		66.6	47.3	14.1	Trace

FLOYD COUNTY.

Georgetown.—Four dug wells supply this town with its water. About 50 per cent. of the population use this supply. One private supply examined was found to be of satisfactory quality.

New Albany.—The water supply of this city is owned by a corporation. The water is pumped from the Ohio River into a system of reservoirs through which it is filtered. Four private supplies examined show three to be badly polluted and one of fair quality.

FOUNTAIN COUNTY.

Attica.—Attica rebuilt her public water supply in 1889. The supply is from bored wells and is pumped to a covered reservoir. The average daily consumption is 275,000 gallons. But few private wells are used. One private supply examined was found to be of good quality.

Covington.—In 1893 the Covington Light and Water Company, a corporation, built the water supply of this town. The water is from two springs which are fed by large streams. The water is pumped to a standpipe and about 50,000 gallons per day are used.

Hillsboro.—No public supply. Four private supplies have been analyzed and two were found to be badly polluted, one was hardly suitable for drinking purposes, and one of fair quality.

Veedersburg.—This town owns a system of two bored wells. The water is pumped to a standpipe holding 90,000 gallons.

FRANKLIN COUNTY.

Brookville.—Brookville owns its own public supply, built in 1891, and which gets the water from a stream. This is pumped to a reservoir. This water is not used for drinking and domestic purposes, cistern water being used for that purpose.

Oldenberg.—No public supply. Analyses of two private supplies showed one to be badly polluted and the other to be a good water.

FULTON COUNTY.

Rochester.—Supply built in 1893 and owned by town. The water is taken from a lake and pumped to a standpipe. About 400,000 gallons daily are used. It is not used for drinking purposes, each family using water from private wells for that. Four private supplies examined showed three to be of good quality, and one to be unfit for drinking purposes on account of large quantities of salt present.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF ROCHESTER CITY PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.		Solids.		Hardness.	Iron.
						Free.	Alb- minoid.	Nitrates.	Nitrites.			Total.	Fixed.		
443	July 31, 1906.	Earthy.	5+	V. s.	S.	.0020	.0324	.0100	.0003	.3		19.2	12.7	8.6	Trace

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF FAIRMOUNT PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.		Solids.		Hardness.	Iron.
						Free.	Alb- minoid.	Nitrates.	Nitrites.			Total.	Fixed.		
599	Sept 20, 1906.	None.	0.0	V. s.	V. s.	.0060	.0124	.0700	.0010	15.0		107.0	76.9	32.1	0.0
601	Sept 20, 1906.	V. s.	0.0	V. s.	S.	.0600	.0028	.0700	.0003	11.8		64.2	38.2	32.8	.0
602	Sept 20, 1906.	None.	0.0	V. s.	V. s.	.0064	.0126	.0700	.0008	15.5		84.1	62.7	31.9	0.0

GIBSON COUNTY.

Oakland City.—In 1903 a private stock company built the water system for this city. The water is taken from a pond and pumped to a standpipe having a capacity of 60,000 gallons. About 50,000 gallons per day are consumed. One private supply examined was found to be badly polluted.

Princeton.—A private company, the Princeton Water and Light Company, was built in 1893. The water is taken from the Patoka River. A standpipe with a capacity of 120,000 gallons is used. About 30 per cent. of the people use this supply, the rest using water from private wells.

GRANT COUNTY.

Fairmount.—This town owns its own supply which was built in 1894. Six artesian wells constitute the supply, the water from which is pumped by suction and forced through the mains by pressure. There are also many wells in the town.

Gas City.—Gas City owns its own water supply, which was built in 1898. The water is pumped from bored wells into a reservoir. There are also many private wells.

Marion.—Marion owns a number of deep bored wells from which its supply is taken. Reservoirs are used. About 1,500,000 gallons per day are used. Water from one well is of medicinal character. Five private supplies have been examined. Three were suitable for drinking, one was badly polluted and one was of doubtful character.

Upland.—A private corporation furnishes Upland with its water supply, the works being built in 1892. Water from a drilled well is pumped direct into the mains by a force pump. Private wells are also used.

GREENE COUNTY.

Bloomfield.—The Home Light and Water Company, built in 1904, supplies Bloomfield with its water. Water from deep bored wells is pumped to a standpipe. Thirty thousand gallons per day are consumed. Water from one private supply examined was found to be of good quality, although an excess of iron was present.

Linton.—A private company, built in 1902, furnishes the supply for this city. Six bored wells are used and the water is forced into the mains by direct pressure. An average of 300,000 gallons per day are consumed. One private supply examined was found to be polluted.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF MARION PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Solids.		Hard-ness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.	Total.	Fixed.		
1029	June 20, 1907.....	V. sl. oily.....	2.0	Sl	Sl	.0004	.0020	.0000	.0000	63.0	41.4	32.9	.0480

CHEMICAL ANALYSIS OF WATER FROM LINTON PUBLIC SUPPLY.

Parts per 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Solids.		Hard-ness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.	Total.	Fixed.		
1068	July 9, 1907.....	None.....	0.0	None.....	None.....	.0014	.0110	.0200	.0004	36.4	30.0	29.1	.01
1181	Aug. 16, 1907.....	None.....	0.0	None.....	Con. brown.....	.0040	.0084	.0300	.0010	34.2	31.4	26.2	.02
1251	Sept. 9, 1907.....	None.....	2.0	None.....	V. s.....	.0004	.0008	.0060	.0000	42.8	35.4	27.8	.012
1332	Sept. 27, 1907.....	None.....	0.0	Much.....	Floc.....	.0330	.0018	.0000	.0100	36.8	24.8	24.4	.04
1351	Oct. 24, 1907.....	None.....	4.0	Sl	Floc.....	.0014	.0020	.0100	.0008	39.2	31.2	25.7	.03

Lyons.—No public supply. Two private supplies examined were found to be unsuitable for drinking purposes, as they were heavily mineralized.

Newark.—No public supply. One private supply was found to be of poor quality.

Worthington.—A private concern built in 1897, furnishes the water supply for this town. The water is from bored wells and is pumped to a standpipe. One private supply was found to be of good quality.

HAMILTON COUNTY.

Arcadia.—No public supply. Five examinations of private supplies have been made; one was heavily polluted, three were found to be receiving sewage and one was a good supply.

Carmel.—No public supply. One private supply was examined and found to be unfit for drinking purposes.

Noblesville.—The Noblesville Water and Light Company, a private company, built in 1891 and 1892, gets the supply from driven wells. The water is pumped into a reservoir and about 400,000 gallons per day are used. Fifteen private supplies have been examined, ten of which were only of fair quality, two very heavily polluted and three were suitable for drinking and domestic purposes.

A SPECIAL INVESTIGATION OF NOBLESVILLE WATER SUPPLY.

For several years past the character of the Noblesville water supply has been under suspicion. That the suspicion has been well founded is shown by the fact that at certain times every year mild epidemics of gastro-intestinal disorders simulating typhoid fever have appeared. While the persons affected generally recovered in the course of a few days, yet the large number of cases occurring at the same time led to the conclusion that the trouble must be with the water supply. As frequent chemical analyses have shown the water to be of unsatisfactory quality, and in response to a request from the City Board of Health, during the month of June a careful study of the supply was undertaken, and the following report rendered:

REPORT ON THE NOBLESVILLE WATER SUPPLY.

The water supplied to the consumers of the Noblesville Water Company is derived from two sources, one a series of driven wells 50 feet deep which draw on a vein of water in gravel underlying hard pan, and the other two wells 275 feet deep which are drilled into the limestone. The shallow wells are driven in the bottom of two brick walled wells so con-

nected as to be practically one reservoir and flow wherever the water level is sufficiently low in the wells. The water from the deep wells is raised by an air lift and pumped into the reservoirs which contain the flowing wells. The mixed water is taken from the reservoirs by the pumps and distributed by direct pressure. The reservoirs have a united capacity of 50,000 gallons and are located on the bank of White river, 30 feet from low-water mark and at the lowest side of the drainage area for a portion of the city. The reservoirs are brick walled and roofed, and at present are level with the ground, which is, however, largely made land. They are 25 feet deep and the wells are driven 25 feet below the bottom of the reservoirs. The bed of White river is practically on a level with the bottom of the reservoirs, and when the river is high the water comes nearly up to the top of the reservoir and is separated from it by a bank of earth but a few feet in thickness. The Wayne street sewer, composed of loosely-jointed sewer pipe, passes within 30 feet of the reservoir and its outlet is 70 feet away. At this point a pool of sewage, filled with undecomposed and partially decomposed fecal matter, is constantly standing. This pool of sewage is fifteen feet from the river at low-water mark and about ten feet above the bottom of the river. The surface drain of Wayne street is fifty feet from the reservoir. It is the practice of the engineers at the pumping station to rely on the supply from the shallow wells as far as possible, but through the summer season this supply is inadequate and it becomes necessary to use the air lift on the deep limestone wells for a portion of each day.

The character of the water in the deep wells is distinctly different from that taken from the shallow wells, and consequently the composition of the water in the reservoirs varies according to the proportion of each water present.

COMPARATIVE COMPOSITION OF WATER FROM THE DEEP WELLS, SHALLOW WELLS AND WHITE RIVER.

As is commonly the case with deep well waters, the free ammonia content is high and the nitrate content low. The solid content is lower than that of the mixed water in the reservoirs and the hardness is practically the same. The chlorine content is somewhat higher than that of the mixed water. Two samples of river water, one taken one and one-half miles above the pumping station, show a decidedly different composition from the deep well water, in that the solid contents are higher, the chlorine content much higher and the nitrate and nitrite contents also higher than in the deep well water. It is apparent that the water in the deep wells is derived from a vein entirely protected against seepage from the river.

Water taken from a second deep well belonging to private parties was almost identical in comparison with water from the deep wells of the Water Works Company and undoubtedly came from the same vein. In order to determine the normal composition of water from shallow wells located on the watershed supplying the shallow wells of the water company, four analyses of water from driven wells have been made. In every case nitrates and nitrites were present, and in other respects the

waters were all similar in composition and in character and were evidently drawn from the same vein as that tapped by the shallow wells of the water company.

CHARACTER OF THE PUBLIC SUPPLY.

Because of the fact that the water delivered at the taps and stored in the reservoir is a mixture of two supplies of entirely different character, and the more because the mixture is never constant in its proportions, the analytical data obtained on samples of the public supply is not as concordant as might be desired. There is, however, a relatively constant composition and the results are uniform in showing departures from the normal. Twenty-eight analyses have been made of water taken from private taps or from the reservoir during the past year. The results uniformly show high nitrates and nitrites, two factors that do not appear in the waters from the deep wells, or at most are found only in small quantities. These factors must therefore be derived from the shallow well water. The factor most constant has been the hardness, which has usually stood between 27 and 30, in but four cases being outside these limits. This is due to the fact that the deep and shallow well waters are of the same hardness.

A presumptive test has been made for the bacilli coli communis in all of the samples. This test determines the presence of bacteria of the same type as the colon bacilli more than it identifies this particular specie. The presumptive test is very valuable when negative results are obtained, since it shows the absence of all bacilli of the colon type. With the exception of a sample collected on the 6th of February, 1907, all samples collected between June, 1906, and April 24, 1907, were free from bacilli of the colon type, but beginning with April 24th, the presumptive test has shown B. Coli, or closely related forms, to be present in 11 out of 15 samples. These determinations have been made on tap samples rather than on samples taken directly from the reservoir. Since the B. Coli are frequently present in reservoir waters, but disappear in the supply pipes, the results are the more conclusive as showing the presence of B. Coli in the water.

Water taken from the stratum tapped by the shallow wells of the water company when in a normal condition, that is, when taken from a drainage area free from inhabitants and unaffected by farming or manufacturing operations, should not show the presence of nitrates or nitrites and should have a chlorine content below 1.0. Such a water would be considered a pure supply. A water might contain nitrates in considerable quantities and have a high chlorine content, and still be safe for drinking and domestic purposes, because whatever impurities had been deposited on the water shed had been fully oxidized and removed by natural filtration before reaching the water-bearing stratum. None of the chemical contents are of themselves injurious. They are but indexes of pollution, and as they vary they mark either an increase or decrease in the amount of polluting material or a change in the efficiency of the ground, which, acting as a filter, removes injurious bacteria and undecomposed organic matter, either by holding them back or destroying them by oxidation and nitrification.

The fact that a series of analyses, extending over a year, shows in every instance the presence of nitrates, nitrites and a chlorine content above the normal, and, moreover, that for the last four months the bacilli of the colon type have been present in 73 per cent. of the samples, is sufficient indication of abnormal conditions. The nitrate and nitrite contents of this supply are not constant, but vary from day to day, apparently independently of the increase or decrease in the proportioning of deep well water present. Water analysts accept the fact that "a state of change is a state of danger." If this criterion is applied to this water, it indicates an unsatisfactory condition. Whether or not the water supply is a "safe" water, or is to be classed as "doubtful" or "dangerous," depends entirely on the character of the material that is responsible for the unusual composition.

It becomes necessary to explain, if possible, the presence of the abnormal chemical constituents and bacteria before a true value can be placed upon the water.

The wells are, as has been shown, in the same stratum as the 30-foot driven wells on the same water shed. These wells, while not seriously polluted, do not furnish normal water and are evidently fed by rain water which falls upon the thickly-settled drainage area and filters downward to the water-bearing stratum, carrying with it all soluble impurities which may be present upon the surface. Since this drainage area is underlaid by gravel beds of excellent quality, it is probable that water in the 30-foot stratum is free from dangerous contamination and would continue to remain so if all privies, open vaults and cesspools upon the drainage were abandoned and sewer connections maintained by every householder. The impossibility of obtaining this condition leaves the water in this stratum in constant danger of receiving a load of inefficiently oxidized and purified sewage.

As before stated, two sewers empty their contents within 70 feet of the reservoir, and pools of human excreta stand upon the surface to pollute the air with stench and the underlying ground for yards around.

Dr. Vaughan, reporting upon the pollution of the ground by privies, said:

"In order to ascertain to what extent soil was contaminated by privy-vaults, I dug down near a privy-vault which was situated on the outskirts of the town and isolated, so that there were no other known sources of contamination around; I dug down a foot behind this privy-vault and took up some soil three feet below the surface to determine the amount of organic matter in it; then I went off six feet and did the same thing, then 12, then 18, then 24, then 30; and, without going into detail, suffice it to say that the contamination of the soil from that single privy, built upon nearly level ground, could be detected 50 feet from the vault plainly."

There is abundant evidence to show that sewage and sewage bacteria will permeate the ground for many yards, and more rapidly if water is pumped from the drainage area and the water level so lowered around the well. When these well-known facts are considered in connection with the location of the wells and reservoirs of the water company, the evidence that the abnormal composition of the water is due to infiltration from the sewers becomes convincing.

CONCLUSIONS.

The public water supply of Noblesville is derived from deep and shallow wells. The deep wells supply potable water and are in no danger of contamination; the shallow wells are fed by the run-off of a thickly-populated area and the water is constantly receiving pollution, both from surface water, which percolates downward to the water-bearing stratum, and from sewers and sewer outlets located near the wells.

The pollution is not extensive and the bacterial content of the water is usually low. This is due to the protection afforded by the excellent gravel beds which lie above the water-bearing stratum, and which, acting as natural filters, remove nearly all the bacteria and organic matter. The efficiency of this natural filter may become impaired at any time, either by an increase in the amount of sewage deposited on the drainage area, or the formation of channels, through which the sewage would have uninterrupted flow. This latter condition had already obtained within the last six months, according to the statements of the engineer of the water works.

Every sanitary engineer will hold that water for public consumption must be above suspicion. That this condition is not true of the supply under consideration is abundantly shown.

HANCOCK COUNTY.

Greenfield.—The supply of this town is from driven wells; 200,000 gallons per day are used.

Carrollton.—No public supply. One private supply examined was badly polluted.

Fortville.—No public supply. One well water analyzed was badly polluted.

Gem.—No public supply. Water from one shallow well was examined and found to be unfit for use.

Shirley.—No public supply. One private supply was examined and found to be of good quality.

HARRISON COUNTY.

Corydon.—Two public supplies furnish Corydon with its water supply. The town has a spring, and a private company built in 1903 gets its water from the creek and pumps it into a reservoir. One private supply analyzed was found to be unfit for drinking purposes.

New Amsterdam.—No public supply. Water from the spring owned by the town and a public well were both of good quality. Water from a private well was of good quality.

New Middletown.—No public supply. Five private supplies were examined. Three were of doubtful quality, one was badly polluted and one was not considered safe for drinking purposes.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF NOBLESVILLE PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.		Total.	Fixed.		
248	Mar. 30, 1906	None	0.0	V. s.	V. s.	.0046	.0018	.0300	.0006	1.6	37.5	30.0	15.0	.02
249	Mar. 30, 1906	None	0.0	None	V. s.	.0050	.0020	.0600	.0006	1.6	47.5	36.6	14.9	.00
275	April 16, 1906	None	5.—	None	None	.0020	.0028	.1200	.0000	1.2	43.6	35.6	16.4	.01
391	June 18, 1906	None	0.0	None	V. s.	.0070	.0016	.1000	.0003	1.10	43.7	31.5	14.8	.00
395	June 25, 1906	V. al. earthy.	0.0	Sl.	Mkd. brown.	.0010	.0034	.1000	.0000	1.2	49.2	35.0	14.6	.10
794	Nov. 27, 1906	None	0.0	None	None	.0010	.0014	.2000	.0006	2.0	40.0	30.0	26.5	.00
795	Nov. 27, 1906	None	0.0	None	None	.0010	.0014	.1600	.0000	1.8	41.4	30.0	26.5	.00
856	Jan. 23, 1907	V. al.	0.0	V. al.	Sl. whitish.	.0020	.0010	.1200	.0008	1.4	38.6	30.6	27.3	.02
862	Jan. 23, 1907	None	0.0	None	None	.0010	.0000	.0600	.0000	1.4	58.0	31.6	26.7	.00
874	Jan. 31, 1907	None	0.0	V. al.	M. floe.	.0170	.0004	.0600	.0003	2.4	41.2	30.0	28.0	.12
881	Feb. 9, 1907	None	0.0	None	V. al.	.0010	.0004	.1000	.0008	1.2	37.0	30.0	26.7	.01
882	Feb. 9, 1907	None	0.0	None	None	.0010	.0006	.1200	.0006	1.6	40.0	31.0	27.0	.01
883	Feb. 9, 1907	None	0.0	None	V. al.	.0014	.0004	.2000	.0006	1.8	41.0	32.0	26.8	.01
885	Feb. 9, 1907	None	0.0	None	V. al.	.0004	.0000	.0700	.0006	1.4	38.0	32.0	26.3	.00
902	Feb. 16, 1907	V. al.	0.0	V. al.	V. s.	.0120	.0000	.1000	.0003	2.2	40.0	30.0	26.6	.04
934	Mar. 23, 1907	None	0.0	None	V. al.	.0010	.0016	.1500	.0015	2.0	44.6	33.6	29.3	.00
935	Mar. 23, 1907	V. al.	0.0	None	V. al.	.0004	.0084	.2000	.0012	2.4	41.4	34.6	29.5	.00

980	April 27, 1907	V. al.	0.0	None.	None.	.0010	.0010	.1200	.0003	2.7	44.6	28.0	26.2	.02
981	April 27, 1907	V. al.	0.0	V. al.	V. al.	.0070	.0014	.0400	.0010	2.2	42.4	26.0	26.2	.05
1083	July 13, 1907	None.	0.0	None.	Sl.	.0064	.0024	.0200	.0010	1.5	56.2	36.4	31.7	.14
1101	July 20, 1907	Sl. foul.	0.0	Sl.	Sl.	.0194	.0110	.0160	.0006	1.9	42.8	32.4	28.1	.024
1126	Aug. 2, 1907	Sl. foul.	0.0	V. al.	V. al. red.	.0060	.0028	.0500	.0005	2.0	44.7	33.8	29.0	.02
1134	Aug. 2, 1907	None.	0.0	V. al.	V. al.	.0044	.0024	.0700	.0015	1.7	56.6	42.4	29.0	.10
1138	Aug. 2, 1907	None.	0.0	None.	None.	.0010	.0016	.1500	.0009	1.4	54.4	36.6	28.2	.07
1142	Aug. 3, 1907	None.	0.0	None.	V. s.	.0014	.0024	.0300	.0003	1.4	46.2	36.2	30.4	.00
1145	Aug. 3, 1907	None.	0.0	None.	None.	.0016	.0012	.2000	.0010	1.5	46.2	38.4	37.0	.02
1155	Aug. 12, 1907	Sl. foul.	0.0	None.	None.	.0014	.0064	.2000	.0040	1.7	53.0	34.0	24.6	.08
1166	Aug. 14, 1907	None.	0.0	None.	None.	.0004	.0010	.0700	.0010	1.2	46.2	36.6	28.1	.02
1175	Aug. 14, 1907	None.	0.0	None.	V. al.	.0034	.0010	.0700	.0010	1.6	42.6	34.8	30.3	.08
1203	Aug. 20, 1907	Dec. foul.	0.0	None.	None.	.0024	.0034	.1000	.0010	1.2	50.8	33.0	28.5	.0004
1205	Aug. 20, 1907	Sl.	0.0	Sl.	None.	.0004	.0014	.0700	.001	1.9	48.8	33.4	31.4	.0240
1208	Aug. 22, 1907	None.	0.0	None.	Sl.	.0040	.0008	.1500	.0014	1.3	44.8	36.8	28.5	.08
1222	Aug. 27, 1907	None.	0.0	None.	None.	.0010	.0028	.0800	.0020	1.3	54.4	36.8	30.6	.02
1316	Sept. 26, 1907	None.	4.0	Sl.	V. s.	.0064	.0014	.0700	.0016	1.5	40.8	26.2	26.0	.04
1335	Oct. 3, 1907	None.	0.0	None.	Sl. fec.	.0010	.0006	.2500	.0008	1.5	44.0	30.8	30.1	.001

CHEMICAL ANALYSIS OF WATER FROM PUBLIC WELLS AT WESTFIELD.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hard-ness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.		Total.	Fixed.		
172	Jan. 3, 1906	None.	5.—	V. s.	Mch. reddish.	.0000	.0010	.2500	.0012	26.8	126.0	92.6	25.9	.0332
173	Jan. 3, 1906	S. earthy.	0.0	None.	V. much floe.	.0364	.0048	.8000	.0012	1.4	47.4	40.0	22.6	.0166
172. Location unknown. 173. Edge of sidewalk.														

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF NEW MIDDLETOWN PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity	Sediment.	Ammonia.		Nitrogen as		Solids.		Hard-ness	Iron.	
						Free.	Albu- minoid.	Nitrates.	Nitrites	Total.	Fixed.			
777	Oct. 29, 1906.....	None.....	0.0	Marked.....	Md. earthy.....	.0004	.0088	.8000	.0003	2.0	58.5	47.0	34.8	.02

HENDRICKS COUNTY.

Avon.—No public supply. One private supply examined found to be unfit for use.

Bridgeport.—No public supply. One private well water found to be heavily mineralized.

Brownsburg.—No public supply. Water analyzed from one shallow well was found to be badly polluted.

Cartersburg.—No public supply. One sample from a private supply was found to be very unsatisfactory.

Clayton.—No public supply. Three private supplies were examined; one was a very good water, one of fair quality, and the other unfit for use.

Coatsville.—No public supply. One private supply was examined and found to be undesirable for drinking purposes.

Plainfield.—No public supply. Two samples analyzed from wells proved to be of good quality.

HENRY COUNTY.

Knightstown.—A system of bored wells built in 1894 furnishes this town with its water supply. Water is pumped direct in daytime, but a standpipe is used at night; 60,000 gallons per day are used.

New Castle. A system of deep drilled wells were built by this city in 1889. This is pumped to two reservoirs, and 750,000 gallons daily are consumed.

Middletown. Three artesian wells bored in 1896 by the town furnish the public water supply. The wells are 86 feet deep.

Shirley.—No public supply. One private supply examined was of doubtful character.

HOWARD COUNTY.

Greentown.—A private plant has recently been installed in this town. The water is from a drilled well and is pumped into a covered reservoir. There are also many private drilled wells.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF NEW CASTLE PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albuminoid.	Nitrates.	Nitrites.		Total.	Fixed.		
485	Aug. 15, 1906.....	None.....	0.0	Slight.....	Slight.....	.0006	.0054	.0600	.0002	.7	41.4	32.7	33.3	.04

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF BROWNSTOWN PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albuminoid.	Nitrates.	Nitrites.		Total.	Fixed.		
411	July 18, 1906.....	S. foul.....	0.0	None.....	None.....	.0010	.0060	.1500	.0010	3.10	68.0	49.5	20.0	.00

HUNTINGTON COUNTY.

Huntington.—This city owns a system of drilled wells which were established in 1890. The water from these wells is pumped to a standpipe, and about 1,000,000 gallons per day are used. One private supply has been examined and the water found to be of good quality.

Roanoke.—No public supply. The water from three private wells was analyzed, and two found to be of good quality, and one unfit for use.

JACKSON COUNTY.

Brownstown.—The supply for this town was built in 1898, and consists of one dug well with a capacity of 400 gallons per minute. The water is pumped into a reservoir.

Crothersville.—No public supply. One well water analyzed was found to be of good quality.

Seymour.—The Seymour Water Co., a private company, built its plant in 1889. The water is taken from the east fork of White river and pumped to a standpipe. A filtration plant is in use, and about 1,000,000 gallons per day are consumed. One private supply examined was found to be suitable for use.

JASPER COUNTY.

Remington.—This town owns its supply, which was built in 1897 and consists of bored wells. The water is pumped to a reservoir. One sample from a private supply was found to be heavily polluted.

Rensselaer.—This supply was built in 1897 and is owned by the city. The supply consists of a drilled well, the water from which is pumped to a tank. An average of 300,000 gallons per day is used.

JAY COUNTY.

Dunkirk.—A system of four driven wells, built in 1894, supplies Dunkirk. The water from these wells is pumped to a reservoir.

Portland.—A system of artesian wells, built in 1890, is owned by the city. Three hundred thousand gallons per day are used.

Redkey.—No public supply. Two private supplies were examined. One was found to be a good water, and the other was badly polluted.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF HUNTINGTON PUBLIC SUPPLY
Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia			Nitrogen as		Solids.		Hard-ness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.	(Chlorine.	Total.	Fixed.		
340	May 17, 1906.	None.	5 —	V. s.	Mch. reddish.	.0004	.0026	.0600	.0000	1.8	44.0	35.9	16.6	.035
346	May 21, 1906.	None.	0.0	V. s.	S. earthy.	.0034	.0040	.0300	.0040	2.4	44.3	36.4	15.2	.02
349	May 24, 1906.	S. veg.	0.0	None.	S. reddish.	.0004	.0076	.0300	.0000	2.2	47.4	37.8	16.1	.001
360	May 26, 1906.	V. s., foul.	0.0	None.	None.	.0002	.0010	.0300	.0020	2.9	46.4	35.6	16.4	.024
366	May 28, 1906.	Earthy.	0.0	V. s.	Mch. reddish.	.0014	.0038	.6000	.0010	1.8	43.3	37.6	15.6	.06
698*	Oct. 22, 1906.	V. s.	0.0	S.	S. reddish.	.1080	.0020	.0000	.0010	18.8	75.7	57.8	28.5	.10

*Not the same supply as other samples.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF MADISON PUBLIC SUPPLY.
Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.			Nitrogen as		Solids.		Hard-ness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.	(Chlorine.	Total.	Fixed.		
288	April 21, 1906.	None.	0.0	V. s.	S. red.	.0204	.0058	.3000	.0080	14.00	133.2	103.0	27.0	.03
289	April 21, 1906.	Earthy.	—	Mld.	Mch. clay.	.0022	.0096	.0600	Trace.	.80	17.1	14.3	2.8	.04
290	April 21, 1906.	None.	0.0	V. s.	Mch. red.	.0310	.0048	1.000	.0040	8.5	131.8	104.6	27.2	.04
326	May 12, 1906.	Earthy.	Mud	Slight.	Slight.	.0006	.0064	.0700	.0000	1.4	22.7	18.1	—	Trace

289 and 326. Ohio river water.

JEFFERSON COUNTY.

Kent.—No public supply. Three private supplies were examined. None of the three were suitable for drinking purposes.

Madison.—This city owns its own supply, which was built in 1871, and gets the supply from the Ohio river and five wells. The water is pumped to a reservoir and 1,100,000 gallons per day are used. Four private supplies have been examined and none of the four were fit for drinking purposes.

JENNINGS COUNTY.

Vernon.—Vernon owns its own supply, which was built in 1893, and which gets its water from the Muscatatuck Creek. The water is pumped to a standpipe. Twenty thousand gallons daily are used, but the drinking water is from private cisterns. Two private supplies were analyzed; one was found to be a good water, and the other of fair quality only.

North Vernon.—This town owns its supply, which was built in 1892, and gets its supply from the Muscatatuck Creek and from springs. This water is pumped to a standpipe, and 250,000 gallons per day are used.

JOHNSON COUNTY.

Edinburg.—In 1893 this town had built a dug well, from which the water is pumped to a standpipe having a capacity of 42,500 gallons. About 125 families use this supply. One private well examined was found to be a good supply.

Franklin.—The Franklin Water & Light Co. is owned by the city and was built in 1890. The supply is obtained from bored wells and pumped to a standpipe and reservoir. The average daily supply consumed is 275,000 gallons.

Greenwood.—The Citizens' Water & Light Co., a private company, installed about three years ago a drilled well, the water from which is pumped into the mains. About 50,000 gallons are used daily. One private well water analyzed was found to be badly polluted, and unfit for use.

Whiteland.—No public supply. One private supply was examined and found to be unfit for use.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF GREENWOOD PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hard-ness.	Iron.
						Free.	Albu- minoid.	Nitrate.	Nitrite.		Total.	Fixed.		
555	Sept. 8, 1906.....	None.....	0.0	None.....	None.....	.0000	.0060	.0200	.0003	5.0	56.2	29.0	29.6	0.0

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF VINCENNES PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hard-ness.	Iron.
						Free.	Albu- minoid.	Nitrate.	Nitrite.		Total.	Fixed.		
261	April 5, 1906.....	None.....	5—	V. s.	V. s.	.0064	.0128	.1000	.0003	1.0	18.8	16.0	5.0	.00

KNOX COUNTY.

Sanborn.—No public supply. Water from a private well was analyzed and found to be of good quality.

Vincennes.—The Vincennes Water Supply Co., a private corporation, built in 1886 a supply which gets the water from the Wabash river. The water is pumped to a standpipe after being filtered. About 800,000 gallons per day are used. One private supply was examined and found to be of fair quality.

KOSCIUSKO COUNTY.

Leesburg.—No public supply. Water from a private well examined was found to be of good quality.

Milford.—A system of wells built in 1902 furnishes the public supply. The water is pumped to a standpipe, and about 55 families use the supply.

Pierceton.—In 1897 this town had a tubular well built, the water from which is pumped into a supply tank. About 18,000 gallons per day are used.

Warsaw.—A private company, called the Warsaw Water Works Company, furnishes the supply for this town. Water is taken from a small lake and pumped to a standpipe. About 1,000,000 gallons per day are used. Two analyses of private supplies were made. One was badly polluted and one was of fair quality.

LAGRANGE COUNTY.

Lagrange.—The public water supply, built in 1893, is owned by the city. Six bored wells are used and the water is pumped direct into the mains.

Lima.—No public supply. Water from two private supplies examined proved to be, one of good quality, and one polluted.

LAKE COUNTY.

Crown Point.—A system of wells was built in 1895 and 1896 for this city. The water is pumped to a reservoir and then to a standpipe; 100,000 gallons per day are consumed.

Dyer.—No public supply. Three private supplies examined. Two were unfit for drinking purposes, and one was of fair quality.

East Chicago.—In 1894 this city built a system which gets its supply from Lake Michigan. The water is pumped to a standpipe. Three million gallons daily are consumed.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF WARSAW PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.		Solids.		Hard-ness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.			Total.	Fixed.		
37	Oct. 3, 1905.	S. earthy.	20	Slight.	Slight.	.0010	.0110	.0000	.0001	.30					.0420

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF HOBART PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.		Solids.		Hard-ness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.			Total.	Fixed.		
369	June 1, 1906.	S. oily.	5—	None.	V. s. red.	.0120	.0112	.5000	.0180	3.6		37.2	27.5	8.4	.03
370	June 1, 1906.	Earthy.	5—	S.	Ex. earthy.	.0018	.0154	.4500	.0003	2.7		33.9	25.0	8.7	.02
371	June 1, 1906.	Earthy.	5—	V. s.	V. s.	.0054	.0128	.3000	.0040	2.4		32.9	25.3	8.6	.015
372	June 1, 1906.	S. earthy.	5—	None.	Mch. red.	.0090	.0150	.5300	.0200	3.4		39.8	38.9	9.0	.015
373	June 1, 1906.	S. earthy.	5—	S.	Ex. red.	.0020	.0190	.5000	.0002	3.4		39.1	27.0	9.0	.04
374	June 1, 1906.	Earthy.	5—	Mtd.	Ex. earthy.	.0014	.0270	.5200	.0003	2.5		36.7	27.3	8.8	.06

Hammond.—This supply was built in 1892 and gets its water from Lake Michigan. The water is pumped direct from the lake into the mains. Six million gallons per day are consumed.

Hobart.—This public supply is from wells. The water is pumped to a standpipe.

Lowell.—In 1898 a deep bored well was built for this town. The water is pumped to a standpipe holding 80,000 gallons. About 250 families use this supply.

Merrillville.—No public supply. Water from a private well examined was found to be unfit for use.

Whiting.—The Standard Oil Company built, about 15 years ago, the public supply for Whiting, and they still own it. About 1,200 people use this supply.

LAPORTE COUNTY.

Laporte.—In 1870 this city built its water supply. The water is from Pine and Stone lakes, and is pumped into a reservoir. The reservoir is part of Lily Lake. One million gallons are used per day, but the water for drinking purposes is from private wells. One private supply examined was found to be of good quality.

Michigan City.—The city controls and owns most of the stock in the plant installed in 1888. The water is taken from Lake Michigan and is supplied by direct pressure. There are many private wells, also. Water from seven school-houses was analyzed; three were of good quality, three fair, and one was unfit for use. Four private supplies were also examined and three were found suitable for use, and one was unsatisfactory.

LAWRENCE COUNTY.

Bedford.—In 1892 this city built its water plant. The supply is taken from White River and is pumped to a standpipe. The water is not filtered and is not generally used for drinking purposes, water for drinking and domestic purposes being from private wells. Water from five private supplies was examined. One was of good quality, three were fair and one was not satisfactory.

Mitchell.—Bored and dug wells furnish this supply. Two samples analyzed were found to be of good quality.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF MICHIGAN CITY PUBLIC SUPPLY.
Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.		Solids.		Hardness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.			Total.	Fixed.		
201	Feb. 5, 1906.....	None.....	0.0	Sl.....	None.....	.0090	.0050	.0050	.0003	.60		17.0	13.1	5.4	.00
897	Feb. 9, 1907....	None.....	0.0	None.....	None.....	.0014	.0010	.0100	.0003	.80		15.0	11.0	10.6	.00
921	Mar. 9, 1907....	None.....	0.0	V. s.....	V. s.....	.0014	.0100	.0300	.0005	.50		16.2	12.4	12.2	Trace.
925	Mar. 9, 1907....	None.....	0.0	V. s.....	V. s.....	.0010	.0050	.0200	.0006	.40		14.4	12.6	11.8	Trace.
928	Mar. 16, 1907....	None.....	0.0	None.....	V. s.....	.0010	.0024	.0000	.0000	.60		16.0	10.0	9.2	.00
940	Mar. 30, 1907....	V. sl.....	0.0	None.....	None.....	.0120	.0030	.0100	.0003	.40		23.2	17.0	12.2	.00

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF MICHIGAN CITY SCHOOL WELLS.
Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.		Solids.		Hardness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.			Total.	Fixed.		
890	Feb. 9, 1907....	None.....	0.0	None.....	None.....	.0010	.0004	.0100	.0003	.80		18.0	12.0	11.7	.08
891	Feb. 9, 1907....	None.....	0.0	None.....	None.....	.0014	.0004	.1500	.0000	.60		16.0	11.2	10.5	.00
892	Feb. 9, 1907....	None.....	5.—	Sl.....	None.....	.0124	.0044	.0100	.0000	2.3		32.4	20.0	15.4	.20
893	Feb. 9, 1907....	None.....	0.0	V. s.....	V. s.....	.0154	.0030	.0200	.0003	.5		5.0	2.0	1.0	.01
894	Feb. 9, 1907....	None.....	0.0	None.....	None.....	.0684	.0036	.0200	.0000	28.6		76.0	70.0	32.3	.02
895	Feb. 9, 1907....	None.....	0.0	V. s.....	V. s.....	.0150	.0010	.0050	.0000	9.1		51.0	30.0	14.2	.12
896	Feb. 9, 1907....	Sl f.....	0.0	Mud.....	None.....	.0660	.0220	.0300	.0000	1.2		45.0	38.0	29.6	.01

MADISON COUNTY.

Alexandria.—In 1894 this city had built a system of drilled wells. The water is pumped to a standpipe. About 800 families use this supply.

Anderson.—The city of Anderson owns its supply, which gets its water from White River. The water is supplied by direct pressure from clear well. About 2,000,000 gallons per day are used. The water is filtered.

Elwood.—A private company, built in 1891, furnishes Elwood with its supply. The system is of driven wells, pumped into a reservoir. About 100,000 gallons per day are used. Many private wells are also used.

Frankton.—Frankton's public system is owned by the city and was built in 1899. The water is from a dug well, and 50,000 gallons per day are used. Drinking water is from private wells. One private supply analyzed was a good water.

Pendleton.—No public supply. Two private supplies were examined, neither of which were suitable for drinking purposes.

Summitville.—The supply was built in 1902 and is owned by the city. A drilled well furnishes the supply.

MARION COUNTY.

Acton.—No public supply. Water from two private supplies were analyzed and both found to be bad.

Beech Grove.—No public supply. One private supply was analyzed and found to be polluted.

Ben Davis.—No public supply. Three private supplies were examined. Two were of good quality and one was polluted.

Bridgeport.—No public supply. One private supply was analyzed and found to be good.

Broad Ripple.—No public supply. Five samples from private wells were analyzed and all found to be of doubtful quality.

Clermont.—No public supply. Four private supplies were analyzed. Two were good and two were polluted.

Cumberland Station.—No public supply. One private well water was analyzed and found to be of good quality.

Ft. Benj. Harrison.—No public supply. One well water analyzed was found to be bad.

Haughville.—No public supply. One private supply was examined and found to be of good quality.

Indianapolis.—The Indianapolis Water Company, a private com-

CHEMICAL ANALYSIS OF WATER FROM PUBLIC WELLS AT BEDFORD.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Solids.		Hard-ness.	Iron.	
						Free.	Albu-minoid.	Nitrates.	Nitrites.	Chlorine.	Total.			Fixed.
646	Oct. 12, 1906.	None.	0.0	V. s.	V. s.	.0010	.0020	.1200	.0020	15.20	84.0	60.7	28.0	.05
647	Oct. 12, 1906.	None.	— .5	V. s.	S. reddish.	.0000	.0024	.0000	.0003	4.40	56.2	44.0	30.6	.04
658	Oct. 16, 1906.	None.	0.0	Slight.	Mch. reddish.	.0010	.0024	.0400	.0010	11.2	80.0	59.0	34.6	.12
659	Oct. 16, 1906.	None.	0.0	Much.	Mkd. reddish.	.0060	.0034	.6000	.0020	16.9	92.7	64.2	28.0	.40
1047	July 1, 1907.	None.	3.0	Much.	V. m. white.	.0024	.0168	.0300	.0001	.1	37.0	32.6	19.9	Trace.
646. North side square. 647. Sixteenth street. 658. West side square. 659. East side square.														

646. North side square. 647. Sixteenth street. 658. West side square. 659. East side square.

CHEMICAL ANALYSIS OF WATER FROM PUBLIC WELLS AT MITCHELL.

Parts in 100,000.

Lab. No.	Date of Analysis	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hard-ness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.		Total.	Fixed.		
566	Sept. 12, 1906	None	0.0	None	V. s.	.0014	.0024	1.000	.0003	6.80	64.5	42.8	21.8	0.0
567	Sept. 12, 1906	None	0.0	V. s.	S. earthy.	.0030	.0060	.8000	.0025	8.20	61.4	41.4	21.2	0.0
603	Sept. 20, 1906	None	0.0	None	V. s.	.0010	.0060	.1200	.0020	25.10	97.6	75.8	21.6	0.0

596. "Big's" public well. 597. Corner Sixth and Main. 603. Location unknown.

pany, built in 1870 a system which obtains the supply from deep wells and a canal from White River. The capacity of the filtration system is 24,000,000 gallons per every 24 hours. It is estimated that 100,000 use the supply. Sixty-three samples from private supplies have been analyzed in the city. Thirty-eight were found to be of good quality; 15 were badly polluted, and 10 were doubtful.

Oaklandon.—No public supply. Water from one private supply was found to be of good quality.

Southport.—No public supply. Six private supplies examined. Two were of good quality, and four were doubtful.

Valley Mills.—No public supply. Two well waters analyzed. One good and one polluted.

West Newton.—No public supply. One private supply analyzed was of doubtful character.

MARSHALL COUNTY.

Argos.—In 1897 this town built a public supply, which consists of a driven well. The water is pumped to a cistern with a capacity of 800 barrels. About 30,000 gallons per day are used.

Bourbon.—A private company furnishes this public supply, built in 1899. The water is obtained from bored wells and is pumped to a standpipe. An average of 30,000 gallons a day is used. A reservoir from which the water is forced is used for fire purposes. Water from one private supply was analyzed and found to be of good quality.

Bremen.—A system of bored wells from which the water is pumped to a standpipe holding 2,700 barrels is used. Two hundred thousand gallons daily are used. There are many private wells.

Culver.—No public supply. One private supply analyzed was found to be of fair quality.

Plymouth.—This town owns a system of flowing wells. The water is supplied by direct pressure. One hundred and fifty thousand gallons daily are used. Water from three private supplies were examined and all were found to be good.

MARTIN COUNTY.

Loogootee.—No public supply. Thirteen private supplies were examined. Twelve of this number were unfit for use and one was a good supply.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF INDIANAPOLIS PUBLIC SUPPLY.
Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albuminoid.	Nitrates.	Nitrites.		Total.	Fixed.		
378	May 29, 1906.	Sl. earthy.	None.	None.	None.	.0018	.0072	.0300	.0000	10.2	58.5	43.4	23.3	0.0
824	Dec. 16, 1906.	None.	None.	None.	None.	.0030	.0020	.1200	.0003	5.2	42.8	29.8	21.5	Trace.
837	Jan. 1, 1907.	None.	0.0	V. sl.	None.	.0004	.0004	.4000	.0003	2.4	37.0	27.2	25.4	0.0
983	May 11, 1907.	None.	0.0	None.	None.	.0010	.0020	.0050	.0000	7.8	45.4	36.0	24.0	.01
996	May 18, 1907.	None.	0.0	None.	None.	.0000	.0020	.0600	.0003	4.8	43.0	36.0	23.9	.02
1015	June 8, 1907.	None.	0.0	None.	None.	.0022	.0064	.2500	.0005	2.2	36.0	21.0	20.3	.014
1228	Aug. 31, 1907.	Sl.	0.0	None.	Consid.	.0060	.0028	.0200	.0004	3.4	58.8	39.8	25.4	.100
1348	Oct. 18, 1907.	None.	22.0	Sl.	None.	.0040	.0060	.0000	.0001	4.8	49.6	39.2	25.6	.060
1349	Oct. 18, 1907.	None.	9.0	Much.	Sl. gran.	.0040	.0060	.0000	.0000	4.8	52.6	42.4	26.6	.100
1362	Oct. 24, 1907.	None.	9.0	V. sl.	None.	.0014	.0024	.0100	.0000	4.40	45.4	35.6	27.0	.024
1367	Oct. 26, 1907.	None.	33.0	V. sl.	Sl.	.0008	.0074	.0000	.0001	5.80	44.4	37.0	26.8	.060
1381	Oct. 30, 1907.	None.	9.0	None.	V. sl.	.0064	.0060	.0000	.0000	5.80	50.4	37.6	25.4	.060
1384	Oct. 31, 1907.	None.	9.0	Sl.	V. sl.	.0016	.0030	.0000	.0000	5.70	48.8	37.6	25.2	.060
1387	Nov. 11, 1907.	None.	9.0	Sl.	None.	.0032	.0040	.0000	.0000	5.20	48.4	36.8	23.8	.060

MIAMI COUNTY.

Bunker Hill.—No public supply. Five samples from private wells were analyzed. Of this number four were suitable for drinking purposes and one was of doubtful quality.

Peru.—A system of drilled wells was built in 1878 for this city. This water is pumped to a reservoir. About 1,500,000 gallons daily are used. Ten samples from private wells have been analyzed, and five were found to be potable; the other five were not suitable for drinking purposes.

Converse.—This town built a system of drilled wells in 1892. The water is pumped to a tank with a capacity of 30,000 gallons. About 135,000 gallons per day are used.

MONROE COUNTY.

Bloomington.—In 1893 this town had built a supply which takes the water from a large pond. The water is pumped to a reservoir and from there into the mains. It is filtered through sand and gravel. Seven hundred families use the supply.

MONTGOMERY COUNTY.

Crawfordsville.—The Crawfordsville Water and Light Company, a private company, built in 1885, a system which gets its supply from springs and wells. The water is pumped to a standpipe from a reservoir. About 1,000,000 gallons per day are used. There are also many private wells. Thirteen private supplies have been examined. Five of these were of good quality, three were fair and five were not suitable for drinking purposes.

Darlington.—A private company operates a supply for this town. The water is taken from a spring. Many private wells are also used.

Ladoga.—No public supply. One private supply examined was found to be badly polluted.

Newmarket.—No public supply. Ten private supplies examined. Eight were polluted and unfit for drinking purposes, and two were of satisfactory quality.

New Ross.—No public supply. One private well water analyzed was badly polluted.

Shannondale.—No public supply. One shallow well water analyzed was found to be badly polluted.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF PERU PUBLIC SUPPLY.
Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.			Nitrogen as		Chlorine.	Solids.		Hard-ness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.	Total.		Fixed.			
853	Jan. 16, 1907	S. fl.	0.0	Much.	V. m. earthy	.0040	.0010	.0000	.0000	18.2	77.2	58.0	21.4	.01	
908	Jan. 26, 1907	None.	0.0	None.	V. s.	.0040	.0000	.1000	.0008	15.6	70.0	53.0	27.1	.01	
1088	July 16, 1907	None.	0.0	None.	Con.	.0390	.0204	.1500	.0010	8.40	57.0	40.0	24.5	Trace.	
1140	Aug. 2, 1907	None.	0.0	V. s.	Sl. floe.	.0024	.0120	.1500	.0010	9.8	65.6	49.0	38.0	.00	
1141	Aug. 2, 1907	None.	0.0	V. s.	V. s. floe.	.0070	.0030	.2000	.0000	5.4	52.8	40.0	31.0	.08	

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF CRAWFORDSVILLE PUBLIC SUPPLY.
Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hard-ness.	Iron.
						Free.	Albuminoid.	Nitrates.	Nitrites.		Total.	Fixed.		
390	July 18, 1906	None	0.0	Sl.	M. reddish.	.0010	.0016	.0200	.0006	1.10	55.5	42.1	17.8	.10
415	July 18, 1906	S. earthy.	0.0	Sl.	M. reddish.	.0040	.0048	.0100	.0005	1.20	60.0	43.1	18.5	.08
579	Sept. 15, 1906	None.	0.0	Sl.	M. reddish.	.0160	.0140	.0000	.0002	.90	53.8	41.5	31.0	.04
941	Mar. 30, 1907	None.	0.0	V. s.	Sl. reddish.	.0050	.0010	.0300	.0003	1.0	60.0	41.4	26.7	.04
1061	July 8, 1907	Sl. earthy.	0.0	Sl.	M. reddish.	.0000	.0010	.0000	.0000	.2	47.0	38.6	29.1	.024
1062	July 8, 1907	Sl. veg.	0.0	Sl.	M. reddish.	.0020	.0020	.0000	.0001	.9	59.0	46.0	35.1	.036

MORGAN COUNTY.

Martinsville.—A dug well built in 1893 supplies this town, the water from which is pumped direct into the mains. Six hundred thousand gallons per day are used. Two private supplies examined were found to be—one of good quality and the other unsatisfactory for drinking purposes.

Mooresville.—A private company furnishes this town with its supply, which consists of two drilled wells. About 15,000 gallons per day are used. One private supply analyzed was found to be of fair quality.

Morgantown.—No public supply. One private supply examined was found to be badly polluted.

NEWTON COUNTY.

Goodland.—Private and bored wells supply this town.

Kentland.—A well bored in 1895 for gas furnishes the water for this town. The water is pumped to a reservoir.

NOBLE COUNTY.

Albion.—This town owns a system of driven wells built in 1895. The water is pumped by direct pressure. Two hundred and fifty families use an average of 50,000 gallons per day.

Avilla.—This supply consists of a drilled well owned by the town, the water from which is pumped to a reservoir. An average of 500 gallons per day is used. There are many private bored wells. One private supply examined was found to be unfit for use.

Ligonier.—Sixteen years ago this town built a water supply, and in 1905 a new plant was installed, consisting of driven wells. The water is pumped to a tank holding 100,000 gallons. An average of 200,000 gallons per day is used. Four analyses were made of a private supply, and each time the water was found to be of unsatisfactory quality.

Kendallville.—Driven wells were installed in this town in 1887, the water being supplied by direct pressure. About 450 families use the supply.

OHIO COUNTY.

No public supply.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF MARTINSVILLE PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis	Odor	Color	Turbidity	Sediment	Ammonia		Nitrogen as		Chlorine		Solids		Hardness	Iron
						Free	Albuminoid	Nitrates	Nitrites			Total	Fixed		
59	Oct. 11, 1905	None	0.0	None	None	.0000	.0010	.4000	.0001	1.50		37.9	27.5		.028
1184	Aug. 16, 1906	None	0.0	None	Sl. floe.	.0010	.0014	.1500	.0010	1.00		39.8	33.4	25.2	.08

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF MOORESVILLE PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis	Odor	Color	Turbidity	Sediment	Ammonia		Nitrogen as		Chlorine		Solids		Hardness	Iron
						Free	Albuminoid	Nitrates	Nitrites			Total	Fixed		
124	Nov. 22, 1905	None	0.0	V. pro.	Con. earthy	Trace	.0014	.6000	.0001	9.4		108.4	68.5	20.3	.120

ORANGE COUNTY.

French Lick.—This town has its public supply, which gets the water from a stream. There are many mineral springs there. The water from French Lick Creek is filtered by private filters.

Paoli.—A private company built the public supply for this town in 1895. The source of the supply is Lick Creek. This water is pumped to a reservoir and about 40 per cent. of the population use the supply. Four private supplies were analyzed. Four were potable and two were bad.

West Baden.—The West Baden Springs Company owns the supply of this town, which was built about 14 years ago. The supply is taken from Lost River and is pumped to a reservoir holding 1,000,000 gallons. About fifty families use the supply.

OWEN COUNTY.

Spencer.—No public supply. Four private supplies examined were all found to be of fair quality.

Quincy.—No public supply. One private supply examined was found to be of good quality.

PARKE COUNTY.

Bloomington.—No public supply. One private well water was analyzed and found to be of doubtful quality.

Bellmore.—No public supply. One water examined was found to be badly polluted.

Judson.—No public supply. Water from a shallow well examined was badly polluted.

Marshall.—No public supply. One private sample was found to be good.

Montezuma.—No public supply. A private supply was examined and found to be of doubtful character.

Nyesville.—No public supply. One well water was analyzed and was satisfactory.

Rockville.—In 1903 Rockville established a public supply for the business portion of the town, consisting of driven wells. The water is pumped to a tank. The residence part of the town is supplied with wells. Three of these wells were examined and one was of fair quality, one was badly polluted and the other a good water.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF LIGONIER PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Solids.		Hardness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.	Chlorine.	Total.	Fixed.	
720	Oct. 27, 1905.	None.	0.0	None.	V. s. reddish.	.0104	.0014	.0000	.0005	.4	32.0	26.8	.05
55	Oct. 23, 1905.	None.	0.4	Marked.	Cons. lime.	.0024	.0034	.0000	.0000	.2	35.8	32.7	.06

CHEMICAL ANALYSIS OF WATER FROM PUBLIC WELL AT CHESTERTON

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Solids.		Hardness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.	Chlorine.	Total.	Fixed.	
303	April 30, 1906.	None.	0.0	None.	None.	.0014	.0024	.0000	.0003	3.00	46.7	38.5	8. tr.

PERRY COUNTY.

Cannelton.—The Cannelton Water Works, a private company built about 14 years ago, supplies this town with water from the Ohio River. This water is pumped to a reservoir. Two hundred families use about 25,000 gallons per day.

Tell City.—This city owns a plant which was installed in 1902. The supply is from wells which are on the banks of the Ohio River. This is pumped to a standpipe. About 50 per cent. of the inhabitants use the supply.

PIKE COUNTY.

Petersburg.—In 1901 this town's supply was built. The water is taken from White River and is pumped to a standpipe holding 120,000 gallons. About 50,000 gallons per day are used.

Winslow.—No public supply. Water from a driven well was examined and found to be unfit for use.

PORTER COUNTY.

Chesterton.—No public supply. Three private supplies examined were found to be good waters.

Valparaiso.—The Valparaiso Home Water Company furnishes the supply for this city. The plant was built in 1886 and the supply is taken from a lake and pumped by direct pressure. About 950,000 gallons daily are used. One analysis made of this supply showed the water to be in good condition. One analysis made of a private supply showed the same to be a good water.

POSEY COUNTY.

Cynthiana.—This town has three public wells.

Mt. Vernon.—The Mt. Vernon Water Works Co., built in 1866, with a filter plant added in 1903, furnishes the supply for this town. The water is taken from the Ohio and pumped into a standpipe; 750,000 gallons per day are used. Three private supplies examined showed all to be good.

New Harmony.—This town is supplied from two private tanks. The supply for these tanks is taken from driven wells. About 1,000 barrels daily are used. Water from a private driven well was examined and found to be of a satisfactory quality.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF VALPARAISO PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albuminoid.	Nitrates.	Nitrites.		Total.	Fixed.		
510	Aug. 25, 1906.	None.	5.0	None.	Much fine.	.0160	.0570	.0000	.0000	2.00	8.2	2.9	3.8	.0000
511	Aug. 25, 1906.	Dec. veg.	7.0	None.	Con. floe.	.0112	.0288	.0200	.0003	.40	9.3	4.5	4.9	.01

CHEMICAL ANALYSIS OF WATER FROM GREENCASTLE PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albuminoid.	Nitrates.	Nitrites.		Total.	Fixed.		
266	April 5, 1906.	None.	5—	V. s.	S.	.0014	.0164	.1000	.0000	.40	28.9	25.0	11.4	.00
293	April 21, 1906.	None.	0.0	None.	V. s.	.0010	.0068	.1000	.0000	1.40	31.1	27.0	12.0	.00
298	April 21, 1906.	None.	0.0	None.	None.	.0010	.0034	.1200	.0000	.25	31.5	28.0	11.6	.015
729	Oct. 30, 1906.	None.	0.0	V. s.	S. earthy.	.0024	.0114	.0100	.0004	.60	29.0	22.9	22.6	.020
746	Nov. 10, 1906.	Sl.	0.0	Sl.	Con. earthy.	.0010	.0080	.0200	.0000	.40	31.2	24.4	23.8	Trace.
1227	Aug. 31, 1907.	Sl.		None.	None.	.0004	.0062	.0150	.0004	.30	30.0	23.0	21.2	.00
1244	Sept. 6, 1907.	None.	4.	None.	None.	.0014	.0124	.0000	.0001	.10	31.6	28.4	23.2	.00

PULASKI COUNTY.

No public supplies.

PUTNAM COUNTY.

Greencastle.—A private company, the Greencastle Water Works Company, built a supply in 1887, taking the water from the Big Walnut stream. The water is pumped to a standpipe. About 75,000 gallons per day are used. Two private supplies examined. One was found to be a good water and the other supply was unfit for drinking purposes.

RANDOLPH COUNTY.

Farmland.—No public supply. One private supply was analyzed and found to be badly polluted.

Modoc.—No public supply. Three private supplies were examined. Two were unfit for drinking purposes, and one was a good water.

Parker.—No public supply. Water from a private well was analyzed and found to be badly polluted.

Union City.—In 1873 this city built a system of wells. The water is pumped into the mains. Wells furnishing 500,000 gallons per minute are used only in case of fire. The average daily consumption is 306,000 gallons.

Winchester.—The Citizen's Water and Light Company a private concern, built a system of drilled wells in 1900. A brick reservoir is used and the water is pumped through the mains by direct pressure. About 275 families use this supply. Water from two private supplies were analyzed. One was of doubtful quality and the other was a good water.

RIPLEY COUNTY.

Batesville.—The Batesville Water Works Company, built in 1902 and owned by a private concern, supplies this town with water from a spring and ponds. The water is pumped to a tank holding 50,000 gallons. About 80 families use this supply.

Napoleon.—No public supply. One private supply examined was found to be badly polluted.

Osgood.—No public supply. One cistern water examined was found to be of good quality.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF WINCHESTER PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis	Odor.	Color.	Turbidity.	Sediment.	Ammonia.			Nitrogen as		Solids.		Hard-ness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.	Chlorine.	Total.	Fixed.		
648	Oct. 12, 1906	None	0.0	None	None	.1100	.0070	.0000	.0002	.8	39.4	30.2	33.1	Trace.
1383	Nov. 8, 1907	None	9.	None	None	.0550	.0030	.0100	.0080	1.00	41.0	32.0	31.2	.04

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF SOUTH BEND PUBLIC SUPPLY.

Parts in 100,000

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.			Nitrogen as		Solids.		Hard-ness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.	Chlorine.	Total.	Fixed.		
179	Jan. 15, 1906	None	0.0	None	V. s. earthy	.0004	.0014	.0600	.0007	1.0	35.7	29.5	21.2	.00
1285	Sept. 14, 1907	None	2.0	None	Sl. granular	.0000	.0004	.0050	.0001	1.70	39.0	29.2	23.5	.00
1286	Sept. 14, 1907	None	2.0	None	Sl. granular	.0000	.0004	.0050	.0001	1.8	39.8	28.8	23.1	.00

RUSH COUNTY.

Carthage.—No public supply. Water from a dug well was analyzed and found to be badly polluted.

New Salem.—No public supply. Water from a school-house was analyzed and found to be unsatisfactory for drinking purposes.

Rushville.—In 1896 this city had built a supply of tubular wells. The water from these is pumped to a reservoir holding 400,000 gallons. About 50 per cent. of the inhabitants use this supply. Four private supplies were analyzed, none of which were very satisfactory for drinking.

SCOTT COUNTY.

Scottsburg.—No public supply. One private supply was examined and found to be of good quality.

SHELBY COUNTY.

Shelbyville.—A private company, the Citizens Water and Light Company, built a system of driven wells for this town twenty-one years ago. The supply is pumped direct to mains. About 300 families use the supply. One analysis of this supply has been made and at that time, December 11, 1906, the water was satisfactory. One analysis has been made of a private supply and this was found to be of good quality.

SPENCER COUNTY.

Rockport.—A private company called the Rockport Water Works Company, built a number of deep wells for this city in 1877. This water is pumped to a standpipe holding 60,000 gallons. Nearly all the population use this supply. One private supply was examined and found to be a good water.

St. Meinard.—In 1874 this town built a supply consisting of a well and spring, the spring being piped into the well.

ST. JOSEPH COUNTY.

New Carlisle.—A system of driven wells was built for this town twenty-six years ago. The water is pumped from these wells to a reservoir holding 33,000 gallons. One hundred families use this supply. Water from a private driven well was analyzed and found to be unfit for use.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF ZANGOLA PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Iron.
						Free.	Albuminoid.	Nitrates.	Nitrites.		Total.	Fixed.	
81	Oct. 23, 1905.	None.	0.6	Marked.	Much red.	.0074	.0034	.0000	.0000	1.6	47.3	38.2	.08
79	Oct. 23, 1905.	None.	0.6	Marked.	Much red.	.0092	.0034	.0100	.0000	1.6	47.5	40.2	.08

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF LIBERTY PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Iron.
						Free.	Albuminoid.	Nitrates.	Nitrites.		Total.	Fixed.	
65	Oct. 11, 1905.	Decided earthy.	0.0	None.	None.	.0022	.0164	.3000	.00032	1.30			.00
77	Oct. 23, 1905.	Decided musty.	.3	Slight.	Slight.	.0038	.0144	.2000	.0010	1.00	36.0	21.5	Trace.
334	May 12, 1906.	S. earthy.	.5	V. s.	S. earthy.	.0000	.3200	.2300	.0008	19.60	159.8	93.7	Trace.
1185	Aug. 16, 1907.	V. strong musty.	.4	None.	None.	.0124	.0284	.0400	.0010	.90	31.8	23.2	.02

Mishawaka.—This town owns its supply, which takes the water from the St. Joseph River. The water is forced into the mains. This is not used for drinking purposes. Four private supplies have been examined and all were of good quality.

South Bend.—In 1873 this city had a system of artesian wells built. A standpipe is used and 4,064,529 gallons daily are used. Six thousand families use the supply. Water from six private wells has been examined. Four of these were good supplies, one was of fair quality and one was not suitable for use.

Walkerton.—In 1897 this town had three driven wells built. This water is pumped to a standpipe. About 50 per cent. of the people use this supply.

STARKE COUNTY.

Hamlet.—No public supply. One private supply examined showed the water to be unfit for use.

Knox.—No public supply. Water from a driven well examined was satisfactory.

STEBEN COUNTY.

Angola.—A private company, the Angola Electric Light, Power and Water Company, built a system of bored wells in 1893. Four hundred and fifty families use an average of 300,000 gallons daily. If the mains are not flushed often this water is not of good quality. Two private supplies were examined and found to be of satisfactory quality.

SULLIVAN COUNTY.

Fairbanks.—No public supply. Three private supplies have been analyzed. Two of these were badly polluted and one was of fair quality.

Farmersburg.—No public supply. Seven private well waters were examined. Six of these supplies were heavily polluted and one was of fair quality only.

Sullivan.—This town owns a public system which takes its supply from a small creek. This was built about ten years ago. A standpipe is used. About 450,000 gallons per day are used, but not for drinking and domestic purposes, as private wells are used for that. One private supply was analyzed and found to be badly polluted.

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF EVANSVILLE PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albuminoid.	Nitrates.	Nitrites.		Total.	Fixed.		
262	Mar. 30, 1906.....	Earthy.....	0.0	V. marked.....	V. marked.....	.0064	.0250	.1000	.0010	.3	28.5	25.0	3.00	Trace.
263*	Mar. 30, 1906.....	None.....	5.	Slight.....	Much reddy.....	.0014	.0020	.0014	.0020	2.8	59.2	50.0	15.4	.06
927	Mar. 11, 1907.....	V. slt. earthy.....	0.0	V. marked.....	1.16 in. mud.....	.0016	.0036	.0400	.0003	.6	53.4	46.0	6.0	0.0
931	April 3, 1907.....	None.....	0.0	Marked.....	Ex. muddy.....	.0014	.0060	.0700	.0000	.80	60.0	52.0	8.0	0.0
937	April 4, 1907.....	None.....	0.0	V. marked.....	Marked muddy.....	.0000	.0014	.0700	.0000	.80	20.2	11.4	6.4	.04
964	April 10, 1907.....	V. slt.....	0.0	Marked.....	Marked muddy.....	.0000	.0010	.0100	.0000	.80	20.0	14.0	6.8	0.0
974	April 21, 1907.....	V. sl. earthy.....	0.0	Much.....	Mkd. earthy.....	.0010	.0010	.0300	.0003	.90	18.0	13.0	6.0	0.0
975	April 21, 1907.....	V. slt.....	0.0	Marked.....	V. marked.....	.0010	.0020	.0300	.0006	.90	21.4	16.0	8.8	Trace.
1007	May 26, 1907.....			Marked.....	V. marked.....	.0050	.0300	.0600	.0003	.80	34.6	25.4	6.1	0.0

*Water from public well.

SWITZERLAND COUNTY.

Vevay.—This town owns a water supply which was built in 1895, and which gets its water from the Ohio River. This is pumped to a reservoir holding 1,500,000 gallons. This water is not used for drinking purposes, private wells being used for that.

TIPPECANOE COUNTY.

Lafayette.—In 1875-76 this city built a public supply consisting of driven wells. This supply is pumped to a reservoir that has a capacity of 4,200,000 gallons. About 5,000 families use the water, and an average of 2,500,000 gallons per day is used.

West Lafayette.—A private company built a supply of driven wells here in 1893.

TIPTON COUNTY.

Tipton.—This city built a system of driven wells in 1892. This water is pumped into two barrel cisterns holding 20,000. About 700 families use this water. One private supply examined was found to be badly polluted.

Sharpsville.—No public supply. One well water was analyzed and found to be potable.

UNION COUNTY.

Liberty.—In 1894 this town built a supply, the source being five springs. These springs are walled and piped into a reservoir. About 250 families use the supply. Four private supplies have been examined. Three were of good quality and one was doubtful.

VANDERBURGH COUNTY.

Evansville.—In 1900 Evansville completed new water works. The supply is taken from the Ohio River and is pumped direct into the mains. Four thousand families use the supply, 9,000,000 gallons daily being used. Twenty private supplies have been analyzed. Of this number ten were potable, seven were polluted and three were of doubtful character.

CHEMICAL ANALYSIS OF WATER FROM EVANSVILLE SCHOOLS.
Parts in 100,000.

Lab. No.	Date of Analysis	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albuminoid.	Nitrate.	Nitrite.		Total.	Fixed.		
532	Aug. 29, 1906	Limy	0.0	None	V. sl. blk.	.0000	.0060	.0400	.0022	.8	13.0	9.5	7.1	.01
533	Aug. 29, 1906	V. sl.	0.0	None	V. sl.	.0000	.0036	.0450	.0000	.8	3.8	1.8	7.3	Trace.
559	Sept. 6, 1906	None	5.	V. sl.	V. sl.	.0014	.0074	.0500	.0000	.9	14.2	9.6	6.6	0.0
560	Sept. 6, 1906	V. sl. limy	0.0	None	V. sl.	.0000	.0074	.0400	.0000	.3	5.6	3.7	2.8	.01
575	Sept. 14, 1906	None	0.0	Slt.	Sl. whited.	.0000	.0048	.0700	.0000	2.0	20.0	13.8	9.2	0.0
854	Jan. 16, 1907	V. sl.	0.0	Much.	Sl.	.0010	.0010	.0300	.0000	.8	11.4	9.2	4.4	Trace.
855	Jan. 16, 1907	None	0.0	Much.	Sl.	.0020	.0014	.0300	.0000	1.0	11.0	7.4	4.0	Trace.

VERMILLION COUNTY.

Cayuga.—No public supply. One private supply examined and found to be good.

Clinton.—Public supply of driven wells. The water is not a normal supply, as bacteria of the colon type are present.

Dana.—No public supply. One private supply was examined and found to be suitable for use.

VIGO COUNTY.

Terre Haute.—A private company called the Terre Haute Water Works Company, owns the supply of this city. The water is pumped from the Wabash River into a settling basin, after which it is passed through mechanical filters and then distributed under direct pressure. Probably 40 per cent. of the population use this supply, the other 60 per cent. being supplied by private wells. Ten supplies other than the city water have been analyzed. Seven were good waters, two were fair and one was badly polluted.

WABASH COUNTY.

North Manchester.—A system of flowing wells established in 1894 is owned by this town. The water is pumped to a standpipe and 70,000 gallons per day is used.

Wabash.—A private company, the Wabash Water Company, built in 1886, gets its supply from bored wells and pumps the water to a standpipe. Seventy-five per cent. of the families use this supply. Three private supplies were analyzed; one was of good quality and the other two were not satisfactory.

WARREN COUNTY.

No public supplies.

WARRICK COUNTY.

Booneville.—This city owns an artificial lake which was built in 1896. A standpipe is used. Three hundred and fifty families use this supply. Seven private supplies have been analyzed. Four of these were of good quality, one was badly polluted and two were of doubtful quality.

CHEMICAL ANALYSIS OF WATER FROM TERRE HAUTE PUBLIC SUPPLY

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Solids.		Hardness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.	Chlorine.	Total.	Fixed.	
756	Nov. 16, 1906	None.	0.0	None.	V. s.	.0030	.0100	.0000	.0002	12.0	58.8	44.1	0.0
759	Nov. 16, 1906	None.	0.0	None.	None.	.0000	.0070	.0000	.0000	12.2	60.5	46.7	0.0
763	Nov. 16, 1906	None.	0.0	None.	None.	.0000	.0040	.0500	.0000	12.2	60.0	45.2	0.0
768*	Nov. 16, 1906	V. foul.	0.0	Marked.	Mkd. earthy.	.0060	.0080	.0700	.0040	8.4	53.6	40.0	Trace.
770	Nov. 21, 1906	None.	0.0	None.	V. s.	.0020	.0048	.0300	.0000	12.2	54.6	41.4	0.0
778	Nov. 21, 1906	None.	0.0	None.	None.	.0032	.0060	.0500	.0000	11.6	53.5	43.0	0.0
779	Nov. 21, 1906	None.	0.0	None.	None.			.0400	.0000	5.6	41.1	30.6	0.0
1111	July 27, 1907	None.	Sl. green	None.	None.	.0044	.0060	.2000	.0000	2.6	33.0	23.0	0.0
1219*	Aug. 27, 1907	None.	6.3	Marked.	V. m. mud.	.0060	.0060	.0700	.0004	2.1	66.0	50.6	0.0
1220	Aug. 27, 1907	None.	2.1	None.	None.	.0004	.0110	.0200	.0000	2.0	35.8	25.0	0.0
1320	Sept. 26, 1907	None.	9.0	None.	Sl. gran.	.0020	.0050	.0150	.0000	4.50	42.4	29.6	0.0
1321*	Sept. 26, 1907	Sl. earthy.	12.0	Much.	V. m. gran.	.0032	.0124	.0100	.0050	4.50	49.6	33.4	.901
1354*	Oct. 26, 1907	None.	6.0	None.	Floc.	.0072	.0170	.0150	.0020	6.40	45.6	32.8	0.0
1355	Oct. 26, 1907	None.		None.	V. s.	.0020	.0060	.0050	.0000	6.20	43.8	35.0	0.0

*Unfiltered water taken from Wabash River.

WASHINGTON COUNTY.

Martinsburg.—No public supply. One supply analyzed was of doubtful quality.

Salem.—A system of springs built in 1884 furnishes the public supply of this town. A reservoir is used. About 80,000 gallons daily are used. Two private supplies examined were polluted.

WAYNE COUNTY.

Cambridge City.—The only supply this city has is for sprinkling and fire protection. Five private supplies have been analyzed. Four of these were of good quality, and one was a fair water.

Economy.—No public supply. One supply examined was of fair quality.

Fountain City.—No public supply. One private supply was examined and found to be of satisfactory quality.

Hagerstown.—No public supply. Five private supplies were examined. Three were of good quality, and two were polluted.

Milton.—No public supply. One well-water analyzed was of good quality.

Richmond.—The Richmond Water Works Company, a private concern, built a well in 1884 and a system of gallery wells. A reservoir is used, holding 8,000,000 gallons. Two million gallons per day are used. One private supply was analyzed and found to be polluted by seepage.

WELLS COUNTY.

Bluffton.—In 1884 this town built a system of driven wells. The water is pumped by compressed air into a well. Three hundred and fifty thousand gallons per day are used. One private supply examined was a good water.

WHITE COUNTY.

Buffalo.—No public supply. One private supply was examined and found to be a good water.

Burnettsville.—No public supply. Two well waters were analyzed. One was good and the other unsuitable for drinking.

Monticello.—A dug well installed in 1895 is owned by this town. A standpipe is used. Two hundred thousand gallons per day are used. One spring water was analyzed and found to be of good quality.

CHEMICAL ANALYSIS OF WATER FROM PUBLIC WELL AT CAMBRIDGE CITY.

Parts in 100,000.

Lab No	Date of Analysis	Odor	Color	Turbidity	Sediment	Ammonia			Nitrogen as			Solids			Hardness	Iron
						Free	Albu- minoid		Nitrates	Nitrites	Chlorine	Total	Fixed			
130	Nov. 22, 1905	None	0.0	None	None	Trace	Trace		.2000	.0003	1.2	38.7	30.4		14.0	0.00

CHEMICAL ANALYSIS OF WATER FROM PUBLIC WELL AT HAGERSTOWN.

Parts in 100,000.

Lab No	Date of Analysis	Odor	Color	Turbidity	Sediment	Ammonia			Nitrogen as			Solids			Hardness	Iron
						Free	Albu- minoid		Nitrates	Nitrites	Chlorine	Total	Fixed			
245	Mar. 30, 1906	None	0.0	None	None	.0010	.0060		.2000	.0002	59.4	182.5	163.0		22.5	.00

CHEMICAL ANALYSIS OF WATER FROM SYSTEM OF RICHMOND PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.		Total.	Fixed.		
488	Aug. 8, 1906.	None.	0.0	None.	V. slight.	.0010	.0098	.3500	.0003	.40	38.7	28.4	25.4	.0000
486	Aug. 8, 1906.	Sl. foul.	0.0	None.	V. sl. earthy.	.0000	.0028	.2000	.0003	.40	40.0	32.5	25.0	.0600
469	Aug. 11, 1906.	Sl. earthy.	0.0	None.	V. slight.	.0060	.0078	.1200	.0050	.20	32.1	23.5	19.7	.0000
488	Aug. 16, 1906.	None.	0.0	None.	V. slight.	.0010	.0046	.1500	.0001	.80	37.2	29.1	30.2	Trace.
490	Aug. 16, 1906.	None.	2.0	None.	Sl. veg.	.0000	.0048	.1500	.0000	.50	39.1	29.4	25.7	Trace.
497	Aug. 22, 1906.	Dec. musty.	0.0	None.	None.	.0020	.0153	.1200	.0016	.20	38.5	25.0	20.2	Trace.
498	Aug. 22, 1906.	None.	0.0	None.	None.	.0000	.0028	.1000	.0000	.50	47.1	32.8	30.7	Trace.
499	Aug. 22, 1906.	Dec. musty.	0.0	Slight.	V. slight.	.0014	.0076	.1000	.0015	.25	37.2	25.0	20.1	.0100
536	Aug. 28, 1906.	None.	0.0	None.	None.	.0054	.0040	.0050	.0000	.25	42.6	34.6	26.6	.0200
537	Aug. 28, 1906.	None.	0.0	None.	None.	.0036	.0142	.0500	.0015	.275	34.3	26.2	22.5	Trace.
538	Aug. 28, 1906.	None.	0.0	None.	None.	.0014	.0046	.1500	.0000	.25	37.3	26.6	24.2	Trace.
539	Aug. 28, 1906.	None.	0.0	None.	None.	.0048	.0132	.0700	.0015	.25	30.4	22.8	18.1	.0000
540	Aug. 28, 1906.	None.	0.0	None.	None.	.0014	.0040	.1000	.0000	.30	35.6	27.2	24.1	.0050
541	Aug. 28, 1906.	None.	0.0	None.	None.	.0010	.0074	.0700	.0003	.275	32.7	25.0	22.5	.0000
613	Sept. 27, 1906.	None.	0.0	None.	None.	.0000	.0050	.1000	.0003	.20	35.0	27.3	23.3	.0200
614	Sept. 27, 1906.	None.	0.0	None.	V. slight.	.0000	.0044	.1000	.0003	.25	35.0	27.0	23.0	.0150

WHITLEY COUNTY.

Churubusco.—In 1898 this town had a bored well put in to be used as the public supply. The water is pumped to a standpipe holding 2,000 barrels. Two hundred families use this supply and an average of 30,000 gallons per day are used.

Columbia City.—This city built a system of drilled wells in 1894. The water is pumped to a standpipe by direct pressure. Seventy-five per cent. of the inhabitants use this water.

South Whitley.—Four bored wells built in 1896 supply this town. The water is pumped by direct pressure. About forty families use this supply.

CHEMICAL ANALYSIS OF WATER FROM MONTICELLO PUBLIC SUPPLY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.		Total.	Fixed.		
102	Nov. 3, 1905.	None.	20.	Marked.	Consid. floe.			.0100	.0003	.30	34.5	29.2		
123	Nov. 22, 1905.	None.	10—	Marked.	V. s.	.0230	.0050	.0000	.0005	.40	33.5	28.0	16.2	.03
509	Aug. 25, 1906.	None.	5.0	Marked.	Consid.	.0250	.0042	.0000	.0220	1.00	37.5	29.2	29.9	.35

CHEMICAL ANALYSIS OF WATER FROM PUBLIC SUPPLY OF COLUMBIA CITY.

Parts in 100,000.

Lab. No.	Date of Analysis.	Odor.	Color.	Turbidity.	Sediment.	Ammonia.		Nitrogen as		Chlorine.	Solids.		Hardness.	Iron.
						Free.	Albu- minoid.	Nitrates.	Nitrites.		Total.	Fixed.		
518	Aug. 25, 1906.	None.	0.0	Slight.	V. s.	.0214	.0034	.0000	.0000	1.00	40.5	32.3	29.9	.15

REPORT

OF

Bacteriological Department

LABORATORY OF HYGIENE

Year Ending October 31, 1907.

DR. HELENE KNABE, Acting Superintendent.

DR. ADA E. SCHWEITZER, Assistant Bacteriologist.

DR. ROSS S. RISSLER, Assistant Pathologist.

REPORT FROM THE

Division of Bacteriology and Pathology

OF THE

INDIANA STATE LABORATORY OF HYGIENE.

The work done in this Laboratory consists principally of such examinations and investigations as will result in the prevention or at least early recognition of infectious diseases. Especially in tuberculosis, typhoid fever and diphtheria, microscopical examination is of value, because:

1. The presence of these diseases can even by the most precise methods not always be determined with certainty.

2. When a case is sufficiently developed to be recognized clinically, it is often too late to save the patient. In the meantime, the disease has usually been communicated to others.

3. Diphtheria, tuberculosis and typhoid fever, preventable diseases, are responsible for more deaths than any other three diseases. They may, however, occur in such mild and masked forms that a correct diagnosis can only be made by means of the microscope.

A verification of the clinical diagnosis in a supposedly tuberculous case will materially benefit not only the patient, but indirectly every one associated with him. Often persons infected with tuberculosis go on in fair health for a long time, with very slight cough and expectoration, never realizing their own condition, nor that they are a source of danger to others. It is especially this class of patients in whose sputum tubercle bacilli are found long before their physical symptoms become at all severe. Such persons, following their daily occupations, may be a prolific but unrecognized source of infection for months or even years.

The statistics of this Laboratory show many interesting cases, and by way of illustration we cite a few instances. The following cases were selected from 100 successive examinations during June, 1907, and only those where very large numbers of tubercle bacilli were found are mentioned.

Case 1.—Male, white; age 20 years. Occupation, college student. Earliest symptoms began eight months ago. Clinical diagnosis, bronchitis.

Case 2.—Female, white; age 21 years. Occupation, housework. Brother died in the winter of 1904-05. Thinks she was in fair health until three months ago.

Case 3.—Male, white; age 45 years. Occupation, grocer. Wife died of tuberculosis in 1904 and soon after he began to fail in health. Did not consult a physician until June, 1907.

Case 4.—Male, white; age 40 years. Occupation, druggist. Has had "bronchial" trouble for ten years.

Case 5.—Female, white; age 39 years. Two uncles and one sister died of tuberculosis. Patient has been in poor health for six months or more, but did not until recently consult a physician.

Case 6.—Male, white; age 59 years. Five of his brothers and one nephew died of tuberculosis. Patient has had a cough for at least five years. No clinical diagnosis was made.

Case 7.—Female, white; age 52; married. Her father, mother and several brothers died of tuberculosis. This case was diagnosed "Asthma." Duration, ten years.

Case 8.—Female, white; age 26. Occupation, stenographer. Failing in health gradually for one and a half years. Had been under a physician's care for some time until June, 1907. Tuberculosis was not suspected. Patient was still working at the time of sputum examination.

Case 9.—Male, white; aged 33 years. Occupation, advertising agent. His mother died of tuberculosis sixteen years ago. Patient has been troubled with a cough for several years, attributed his failing health to overwork. Consulted a different physician occasionally, but none had made a diagnosis of tuberculosis.

Case 10.—Male, white; aged 45. Occupation, floorwalker in a department store. Complained of a cough for at least ten months. Clinical diagnosis, "Bronchitis."

The statistics of this Laboratory show that many respiratory troubles in patients past 45 years of age are diagnosed as chronic bronchitis and treated as such, often for a long time, and when finally a sputum examination is resorted to, the case proves to be tuberculosis.

The same danger encountered with regard to tuberculosis we find in typhoid fever. Cases of this infection may be so mild, or the symptoms so atypical, that it is impossible to make a clinical diagnosis with certainty.

It is known that typhoid bacilli are always present in the excreta of persons infected with this disease, notwithstanding the fact that the symptoms are of the mildest type, and it has also been proved that these bacilli are discharged for some time, several months even, after the patient has apparently recovered, leaving him still a source of infection. We can readily see, therefore, that it is of the utmost importance that an early and correct diagnosis of typhoid fever is made, especially in light cases, and this can best be done by the Widal reaction. This reaction gives correct results in 96 per cent. of cases of typhoid fever, and by means of it we have repeatedly been able to discover epidemics of this infection when many of the cases were of a mild type, or presented atypical symptoms. We have had no opportunity to investigate any extensive epidemics this year, but specimens came in from nearly every county in the State. The number of Widal tests made in this Laboratory per month varies somewhat, according to the season.

The Laboratory of Bacteriology has, we believe, given considerable assistance in the prevention of diphtheria. In this infection, as in typhoid fever, the mild cases constitute the greatest danger to a community. They are either overlooked entirely or treated as simply pharyngitis and not until severe cases make their appearance do people realize that diphtheria has been in their midst for some time and gained a strong foothold.

The statistics of this Laboratory show that physicians do not send specimens from mild cases of sore throat until there have been some in which the symptoms were severe enough to be clinically recognized as diphtheria. The so-called "first cases" from any locality which we find in our records are all quite severe, but in nearly every instance we have been able to get from the attending physician a report to the effect that a series of very mild cases of pharyngeal inflammation preceded the severe one.

A survey of 150 cases where a microscopical diagnosis of diphtheria was made, reveals the fact that only in 46 per cent., i. e., less than half of the entire number, the clinical diagnosis was diphtheria, 22 per cent. were diagnosed as tonsillitis. In 27 per cent. the physician stated that he had not made any diagnosis. Five per cent., usually in infants, were diagnosed as croup.

Often it occurs that physicians send a specimen for release from quarantine four or five days after the first suture. We do not believe that this is at all safe, because an examination may give a negative result because antiseptics have been used in the throat, and we therefore repeatedly advise that cultures be prepared from

the nose also. In all cases where this was done we found that diphtheria bacilli could still be cultivated from the posterior nares when the preparations made from the fauces and posterior wall of the pharynx were entirely negative. The following cases we believe worthy of being reported here:

Case 1.—Miss X——, a teacher in whose class several cases of diphtheria had occurred, developed a pharyngitis. Her physician finding only a slight redness of the tonsils, no membrane or exudate present in the throat, made a diagnosis of tonsilitis and treated it as such. The constitutional symptoms of this case were very slight and the patient was able to follow her vocation. The health officer, upon hearing of the case, went to investigate and sent a specimen of the exudate from the patient's throat for microscopical examination, which disclosed the fact that diphtheria bacilli were responsible for this trouble.

Case 2.—During the last week of April, 1907, a child in the family of Mr. L—— died, of what was believed to be measles, with laryngeal involvement. April 30, Anna, age 5 years, developed the same symptoms and the family physician again diagnosed measles. On May 9 another physician was called to see the child. When he arrived the little girl had just died, and on examination of the body a thick membrane was found covering fauces and tonsils. An immediate diagnosis of diphtheria was verified by a microscopical examination.

Case 3.—Miss A——, age 20 years. Physician's diagnosis of this was tonsilitis, but he sent some mucus from the inflamed area to be examined. Diphtheria bacilli were found to be causing this inflammation. Careful inquiry disclosed the fact that a sister of the patient had been exposed to diphtheria and began to complain about a sore throat one week before. Three other sisters fell ill with the same disease the day before this patient was stricken.

Case 4.—This is one of the most interesting instances we have to report. Mr. ———, 57 years of age, developed a very sore throat, September 19, 1907. A physician saw him September 21, and diagnosed the case as one of quinsy, the left tonsil being badly swollen. Later the right side was affected and the abscess apparently opened, as considerable quantities of pus were expectorated. September 25, the patient began to cough up membrane and was very sick during the night. September 26, the physician saw him early in the morning and found him much improved. A large quantity of membrane had been expectorated during the night. The physician took some of this membrane away with him in order to have it

examined. About noon a message came to the physician that the man was dying, and when he reached the bedside the patient was cyanotic and giving all symptoms of asphyxiation, dying shortly after. A test tube full of the expectorated material which we received contained large masses of membrane, some pieces shaped like casts of very small bronchi. The largest piece was 38 mm long, 25 mm wide and varied in thickness from 2 to 4 mm. On microscopical examination it was found to consist of fibrinous material, holding in its meshes diphtheria bacilli. The piece was ring-shaped and, judging from its shape, came from the bifurcation of the trachea. Very few bacteria except diphtheria bacilli were found.

Following is a report of the work done during each month, with tables showing the kind of work and number of examinations of each, also short conclusions. Other tables show the number of examinations made from each county:

November, 1906.—The statistics of this Laboratory for November show an increase in the number of specimens examined. This increase is due to the numerous cases of diphtheria occurring in the State. Wabash seems to have suffered severely, judging from the number of cultures showing diphtheria bacilli which were received from that town. In like manner have also Ladoga, Anderson, Earl Park and Kokomo. Many cultures were received from rural districts. We notice that many of the cultures which contained diphtheria bacilli were taken from cases where no membrane was present in the throat and few constitutional symptoms. The fact that these cultures are now received more frequently than formerly is very gratifying to the workers in this Laboratory, because we know if the physicians make use of this Laboratory in the diagnosis of all mild cases, the spread of diphtheria will be considerably diminished in a short time.

The number of examinations of sputum does not differ much from that of the preceding months. There were, however, more specimens of urine submitted. In only one of the thirteen specimens of urine submitted, tubercle bacilli were found, and as we have not been able, under the present conditions, to keep guinea pigs for inoculation, the remaining twelve cases are still doubtful, because the only certain way was to demonstrate tubercle bacilli in urine, when present in small numbers, is by the method of animal inoculation.

Several specimens of worms were also received. Most of these were found by farmers preparing sour kraut. All of these were the so-called horse hair snakes (*Gordius*), and not dangerous.

EXAMINATION FOR BACILLUS TUBERCULOSIS.

Sputum—		
Positive	60	
Negative	104	
	—	164
Urine—		
Positive	1	
Negative	12	
	—	13
Feces—		
Negative	1	1
Stomach contents—		
Negative	1	1
Pus—		
Negative	1	1
Pleuritic fluid—		
Negative	1	1
Gland (human)—		
Positive	1	1
	—	182

WIDAL TEST FOR TYPHOID FEVER.

Blood—		
Positive	31	
Negative	37	
	—	68

EXAMINATIONS FOR BACILLUS DIPHTHERIAE.

Culture from throat—		
Positive	70	
Negative	72	
Unsatisfactory	8	
	—	150

EXAMINATIONS FOR MALARIA.

Blood—		
Positive	2	2

MISCELLANEOUS.

New Growths—		
Adenoma	1	
Carcinoma	2	
Sarcoma	3	
Papilloma	1	
	—	7

Glanders (horse)—		
Negative	1	1
Urine for gonococci—		
Positive	1	1
Worms—		
Gordius	3	3
Larvae of botfly	1	1
	— 13	
Total number of specimens		415

OUTFITS SENT OUT.

Sputum	172
Blood outfits for Widal tests	94
Serum cultures for diphtheria	199
Outfits for examination of blood for malarial parasites	3
	— 468

December, 1906.—The total number of specimens examined during the month of December is considerably lower than that for November. This is mostly due to the difference in the number of diphtheria cultures examined. We believe there is fully as much, if not more, diphtheria in Indiana than was last month, but many cases are light and therefore may easily pass without recognition; others so severe that a clinical diagnosis seems sufficient to the attending physician and he does not ask for a microscopical examination.

Typhoid fever is still in evidence, more than half of the number of blood examinations giving a positive result.

The number of miscellaneous specimens examined has been unusually high. Cases of hydrophobia appear occasionally and one of them we had the opportunity of examining this month. The history developed that in the same town from which this specimen came a dog showed symptoms of hydrophobia in August, 1906, and bit another dog and some hogs. The latter developed the disease and were killed; the dog, which had also been bitten, left alive. This same animal developed hydrophobia in September, biting two other dogs, one of which again developed the infection on the ninth day and was promptly killed. The other dog, whose head we examined September 30, was allowed to live because "it did not show any symptoms of disease." Why people would let an infection go on in such a manner is hard to understand, yet we find it occurring again and again.

EXAMINATIONS FOR BACILLUS TUBERCULOSIS.

Sputum—		
Positive	43	
Negative	89	
	—	132
Typhoid fever—		
Positive	17	
Negative	10	
Unsatisfactory	1	
	—	28
Diphtheria—		
Positive	30	
Negative	33	
Unsatisfactory	2	
	—	65
Malaria—		
Negative	1	1
Water	1	1
Miscellaneous specimens	18	18
	—	
Total examinations	245	

OUTFITS SENT OUT.

Sputum	198
Blood outfits for Widal tests	120
Serum cultures for diphtheria	182
Outfits for examination of blood for malarial parasites..	0
	— 500

January, 1907.—This month has brought very little of importance in our routine work, but a change has been made in the outfits in order to get permission to ship them through the mail. The new outfits are considerably heavier than those we had before, and therefore will require more postage. The new outfits for diphtheria have been changed further in so far as no culture media accompany them, but a cotton swab inoculated from the throat is sent for examination. This will in some instances lengthen the time which must necessarily elapse before a report can be made to the physician, but in many cases we can report by telegraph or telephone very soon after the specimen reaches the Laboratory, because the preparations made from the swab show an almost pure culture of diphtheria bacilli.

The increase in the number of examinations of tuberculous sputum is very slight, but considerably more Widal tests have been made during January than in the preceding month.

Sputum—		
Positive	71	
Negative	108	
	—	179
Typhoid fever—		
Positive	30	
Negative	15	
Unsatisfactory	2	
	—	47
Diphtheria—		
Positive	18	
Negative	36	
Unsatisfactory	5	
	—	59
Miscellaneous specimens	14	
	—	
Total number of examinations		299

OUTFITS SENT OUT, JANUARY, 1907.

Sputum	268
Blood outfits for Widal tests	116
Diphtheria outfits	122
	— 506

February, 1907.—While the number of sputum examinations remains nearly stationary, the Widal tests for this month have increased considerably.

Six samples of water and four samples of milk were examined during February, but this kind of work is not as much in demand as it properly should be.

We are now in position to make guinea pig injections to determine the presence of tubercle bacilli in pleuritic fluid, etc., and to also verify the microscopical findings in cases of supposed Rabies. A number of rabbits and guinea pigs were bought last month and these animals will be used for the above purposes.

Sputum—		
Positive	77	
Negative	133	
	—	210
Typhoid fever—		
Positive	35	
Negative	23	
	—	58
Diphtheria—		
Positive	7	
Negative	23	
Unsatisfactory	1	
	—	31

Malaria—		
Negative	1	1
Water	6	6
Milk	4	4
Miscellaneous specimens	5	5
		—
Total number of examinations.....		315

OUTFITS SENT OUT.

Sputum	286
Blood outfits for Widal tests.....	124
Diphtheria	135
—	545

March, 1907.—The routine work in this Laboratory is gradually increasing. We have had more specimens of diphtheria than during February, and the many colds contracted this month necessitated many sputum examinations.

An epidemic of hydrophobia occurring in Greencastle, Putnam County, is interesting enough to be reported in detail:

On February 24 a dog showing symptoms of hydrophobia bit two cows and a number of hogs; one of the latter died on the third day. The dog was, upon the request of the health officer, Dr. W. H. Hutcheson, confined and the progress of the malady watched. The animal died on March 1, and its head was sent to the Laboratory of Bacteriology, where microscopical examination verified the diagnosis of hydrophobia. The hogs, seventeen in number, which had been duly quarantined, were attacked by the disease on March 22, and were all shot. Two cows and one hog, bitten at the same time, had shown no symptoms when we had the last communication from Dr. Hutcheson, March 30.

Sputum—		
Positive	54	
Negative	174	
		— 228
Typhoid fever—		
Positive	8	
Negative	32	
		— 40
Diphtheria—		
Positive	20	
Negative	25	
		— 45

Malaria—

Negative	2	2
Water	5	5
Milk	6	6
Miscellaneous specimens	21	21
	—	347

OUTFITS SENT OUT MARCH, 1907.

Sputum	275
Blood outfits for Widal tests	132
Diphtheria	140
	— 547

April, 1907.—Little is to be said of this month. The number of specimens to be examined for typhoid fever is very little higher than that of March, but the way in which the specimens are prepared is often unsatisfactory. Physicians persist in sending so very small drops of blood that it is almost impossible to make a correct dilution. Such reactions will, of course, be doubtful and no accurate conclusions can be drawn.

Eight thousand (8,000) units of diphtheria antitoxin were shipped to a physician for use on a little patient whose parents were too poor to pay for it.

There seems to be more hydrophobia in Indiana than people as a rule believe to be the case. We have examined the brain of four dogs during the month of April. In three of the specimens Negri bodies were found and results were verified by injections of some of the brain substance into guinea pigs, all of which died. The fourth specimen contained no Negri bodies and the guinea pig injected remained perfectly healthy.

Sputum—

Positive	68
Negative	133
	— 201

Typhoid fever—

Positive	17
Negative	27
Unsatisfactory	1
	— 45

Diphtheria—

Positive	11
Negative	17
	— 28
	— 274

Water	1	1
Milk	3	3
Miscellaneous specimens	13	13
	—	17
Total number examinations		291

OUTFITS SENT OUT.

Sputum	373
Blood for Widal tests	154
Diphtheria	179
	— 706

May, 1907.—We have not observed any cases of special interest this month. Only twenty-one specimens of blood from cases of suspected typhoid fever were received for examination. Six samples of water and one sample of milk were also examined.

People rarely ever think of inquiring into the conditions of their water supply until they have had several cases of typhoid fever in the community. Since the Laboratory of Bacteriology has no special medical inspectors who could be sent into the infected districts to collect and send specimens from every case suspected of having typhoid fever, we are entirely dependent upon the physicians for such work, and it has been our experience that it is rare for them to send specimens from the mild and atypical cases, i. e. in whom the symptoms last a short time only and the fever curve is not pronounced. The statistics collected last year, during the summer when several epidemics were in progress, demonstrate conclusively that while a number of persons infected with typhoid fever have not developed the typical form of this disease, the anti-toxic properties upon which is based the principle of the Widal reaction have been formed in the blood of these persons and the previous infection can easily be recognized.

The number of specimens of supposedly tuberculous sputum remains nearly stationary from month to month. We are making some efforts to reach more of the physicians of this State and find a slow but sure increase in the number of new names appearing upon our records.

Sputum—	
Positive	85
Negative	144
	— 229

Typhoid fever—		
Positive	5	
Negative	16	
	—	21
Diphtheria—		
Positive	13	
Negative	12	
	—	25
Water	6	6
Milk	1	1
Miscellaneous specimens	14	14
	—	
Total number of examinations		296

OUTFITS SENT OUT.

Sputum	232
Blood for Widal tests	85
Diphtheria	114
Malaria	43
	— 474

June, 1907.—We notice that hydrophobia is still present in Indiana, having received one dog's head during this month. Negri bodies were found present in the brain and the person bitten by the dog was advised to go to a Pasteur Institute for treatment.

Aside from the usual number of examinations for tuberculosis, typhoid fever and diphtheria, we have examined several blood smears for malarial parasites. The unsatisfactory way in which specimens are prepared makes such work very discouraging. The instructions which accompany each outfit are rarely ever followed, and physicians as a consequence are disappointed in the results of the examinations.

A small bottle full of soil was sent to the Laboratory for examination in order to determine if it contained tetanus bacilli. A small boy had injured his foot through a splinter and a short time afterward died in convulsions. Several physicians attended the case, some contending for tetanus, others against it. The specimen of soil was taken from the woodshed where the injury occurred and when inoculated into the proper culture media, a pure culture of tetanus bacilli was obtained. The culture was tested by the inoculation of a guinea pig, which died in three days of tetanus.

Sputum—		
Positive	71	
Negative	123	
	—	194

Typhoid fever—		
Positive	8	
Negative	16	
Unsatisfactory	3	
	—	27
Diphtheria—		
Positive	15	
Negative	10	
	—	25
Malaria—		
Positive	1	
Negative	6	
	—	7
Water	9	9
Anemia—		
Negative	2	2
Miscellaneous specimens	13	13
	—	
Total number of examinations		277

OUTFITS SENT OUT.

Sputum	317
Blood outfits for Widal tests	86
Diphtheria	104
Malaria	53
	— 560

July, 1907.—In comparison to last month, we note an increase in the number of specimens of suspected diphtheria, nearly three-fourths of which contained Klebs-Loeffler bacilli.

Tuberculosis is always responsible for the largest amount of our work, and we are sure we do not get an opportunity to examine one-tenth the number of cases present in any locality, because there are still so many physicians who never make use of our facilities.

We have also made a few more examinations of blood from suspected cases of typhoid fever, but very few of them gave a positive result.

Sputum—		
Positive	80	
Negative	139	
	—	219
Typhoid fever—		
Positive	31	
Negative	53	
	—	84

Diphtheria—		
Positive	27	
Negative	10	
	—	37
Malaria—		
Positive	1	
Negative	3	
	—	4
Water	10	10
Milk	2	2
Miscellaneous specimens	15	15
	—	
Total number of examinations		371

OUTFITS SENT OUT.

Sputum	324
Blood outfits for Widal tests	121
Diphtheria	190
Malaria	59
	— 694

August, 1907.—We have received more samples of water this month than heretofore. There were 59 samples and a large per cent.—22—were unfit for drinking purposes.

Of the blood specimens tested for the Widal reaction, a large number gave a negative result, some because the drops submitted were too small, others because the disease was probably a non-typhoidal affection.

Plasmodium Malariae was not found in any of the seven specimens received.

Sputum—	
Positive	75
Negative	119
	— 194
Typhoid fever—	
Positive	13
Negative	113
	— 126
Diphtheria—	
Positive	8
Negative	5
	— 13
Malaria—	
Positive	0
Negative	7
	— 7

Water—		
Good	28	
Fair	9	
Bad	22	
	—	59
Milk	7	7
Miscellaneous specimens	25	25
	—	
Total number of examinations		431

OUTFITS SENT OUT.

Sputum	205	
Blood outfits for Widal tests	134	
Diphtheria	50	
Malaria	25	
Water	60	
	—	474

September, 1907.—The number of blood specimens to be examined for the Widal reaction was higher this month, not very many, however, giving a positive result.

Samples of water from different parts of the State arrived at the Laboratory, their number amounting to 44, of which 18 were non-potable.

A serious condition is arising in this State with regard to diphtheria infection. While there have been some cases occurring every month, a decided increase has become noticeable in September. This, we feel sure, is due to the fact that schools convene this month. Of 43 specimens submitted, 38 contained diphtheria bacilli, and unless prompt and severe means are employed to check the spread of this disease, we predict epidemics of considerable magnitude for the coming winter. We are now warning physicians of the danger and advising that specimens be sent to this Laboratory at once from every case suspected.

Sputum—		
Positive	76	
Negative	110	
	—	186
Typhoid fever—		
Positive	30	
Negative	113	
	—	143
Diphtheria—		
Positive	38	
Negative	5	
	—	43

Malaria—

Positive	1	
Negative	12	
Unsatisfactory	3	
		16
Water	44	44
Miscellaneous specimens	12	12
Total number of examinations		444

OUTFITS SENT OUT.

Sputum	324
Blood outfits for Widal reaction	150
Diphtheria	141
Malaria	26
Water	50
	691

October, 1907.—The steady increase in the number of specimens examined at the Indiana State Laboratory of Bacteriology seems to be an indication that this department serves to some degree the purpose for which it was created. When we consider the fact that each examination in this Laboratory is equal to so much assistance rendered to both physician and patient, frequently meaning the saving of human life, we have reason to believe that this Laboratory will in time become one of the greatest factors in the prevention of infectious diseases in the State of Indiana.

We have received specimens from a very small percentage of the physicians practicing in this State, but many new names have recently appeared on our records. While the process of getting acquainted with the practitioners has been somewhat slow, we are proud to record the fact that any one of them once availing himself of our services has found our assistance helpful in his work.

During the past month we have examined 188 specimens of sputum, of which a large percentage did not contain tubercle bacilli. This is due to the fortunate fact that physicians now send specimens of sputum as soon as there is the slightest suspicion that the case might be of tubercular origin. The contrast noted in our experience of two years ago is rather striking. At that time practically every specimen which we received contained tubercle bacilli; now, even with the aid of a centrifuge and the most painstaking examination, it is sometimes necessary to search two or three, in one case even five, successive samples of sputum before tubercle bacilli were discovered. It can readily be seen that cases recog-

nized early not only will react more satisfactorily to treatment, but the danger of infection to persons associated with the patient is greatly lessened because the latter can be cautioned and educated properly before his carelessness has resulted in the infection of his surroundings.

The typhoid fever situation is as serious as ever, though the Laboratory did not receive quite as many specimens of blood as last month, the difference being twenty-seven more in September, yet there are nearly half of the cases examined in October in which the Widal reaction was positive. If we could apply the Widal test to blood from all persons living in a locality where typhoid fever has occurred, who are suffering from anemia, malaise, indigestion, so-called summer complaint, etc., we would find that there is a large number of cases of a mild ambulatory typhoid fever not ordinarily recognized as such. At least this has been our experience in several epidemics which were carefully inquired into.

The number of examinations made with regard to the presence of diphtheria has greatly increased over that of any month since November, 1906. We know that every year soon after school begins, mild cases of sore throat occur among the children. Occasionally a patient gets so sick that the physician becomes suspicious of diphtheria, but "there being no diphtheria in the community," if there is no membrane formation, no special attention is paid to it. A large number of these cases are undoubtedly diphtheria of a mild type which eventually precipitate some epidemic. There are several epidemics in progress now. At Plainfield the cases are mostly of a light character, but a few patients developed very grave symptoms. From Albion, Brazil, Muncie, Larwill and Fort Wayne specimens of diphtheria have been received, and we have urged the physicians to make frequent use of this Laboratory for the benefit of their respective communities.

We have begun to make an effort to interest the physicians in a general crusade against diphtheria by a careful examination of all cases of pharyngitis coming under their supervision. The facilities of this Laboratory are such that we can handle the increased number of specimens which this procedure would bring without any delay.

Sputum—

Positive	70
Negative	118

— 188

Typhoid fever—

Positive	48
Negative	68
	116

Diphtheria—

Positive	80
Negative	35
	115

Malaria—

Positive	1
Negative	4
	5

Miscellaneous specimens	18	18
Water	27	27
Milk	3	3

Total number of examinations 472

OUTFITS SENT OUT.

Sputum	373
Blood outfits for Widal reaction	160
Diphtheria	186
Malaria	14
Water	24
	757

SPUTUM EXAMINATIONS—COUNTIES.

<i>Counties.</i>	<i>Positive.</i>	<i>Negative.</i>	<i>Total.</i>
Adams	11	22	33
Allen	21	30	51
Bartholomew	36	62	98
Benton	5	8	13
Blackford	10	15	25
Boone	10	19	29
Brown	..	..	..
Carroll	9	12	21
Cass	7	12	19
Clark	6	16	22
Clay	9	9	18
Clinton	6	25	31
Crawford	6	5	11
Davless	5	10	15
Dearborn	1	5	6
Decatur	8	17	25
Dekalb	4	14	18
Delaware	17	32	49
Dubois	..	..	..
Elkhart	10	30	40
Fayette	3	8	11

SPUTUM EXAMINATIONS—Continued.

<i>Counties.</i>	<i>Positive.</i>	<i>Negative.</i>	<i>Total.</i>
Floyd	7	11	18
Fountain	8	14	22
Franklin	1	..	1
Fulton	..	..	..
Gibson	6	11	17
Grant	21	37	58
Greene	1	3	4
Hamilton	13	32	45
Hancock	13	18	31
Harrison	4	8	12
Hendricks	29	52	81
Henry	36	27	63
Howard	9	17	26
Huntington	..	..	..
Jackson	18	27	45
Jasper	6	14	20
Jay	12	14	26
Jefferson	6	13	19
Jennings	3	2	5
Johnson	7	15	22
Knox	12	34	46
Kosciusko	6	12	18
Lagrange	9	24	33
Lake	1	4	5
Laporte	10	25	35
Lawrence	1	..	1
Madison	36	34	70
Marion	145	42	187
Marshall	3	4	7
Martin	8	2	10
Miami	..	6	6
Monroe	1	2	3
Montgomery	16	14	30
Morgan	4	1	5
Newton	1	1	2
Noble	6	22	28
Ohio	..	..	..
Orange	..	..	..
Owen	2	4	6
Parke	5	14	19
Perry	3	2	5
Pike	3	3	6
Porter	..	..	..
Posey	5	12	17
Pulaski	4	11	15
Putnam	6	12	18
Randolph	10	43	53
Ripley	2	4	6

SPUTUM EXAMINATIONS—Continued.

<i>Counties.</i>	<i>Positive.</i>	<i>Negative.</i>	<i>Total.</i>
Rush	8	9	17
Scott	..	2	2
Shelby	1	2	3
Spencer	3	14	17
Starke	5	14	19
Steuben	..	2	2
St. Joseph	1	3	4
Sullivan	10	12	22
Switzerland	2	5	7
Tippecanoe	3	26	29
Tipton	10	7	17
Union	3	7	10
Vanderburgh	14	17	31
Vermillion	8	18	26
Vigo	7	19	26
Wabash	5	15	20
Warren	1	..	1
Warrick	1	..	1
Washington	3	3	6
Wayne	40	65	105
Wells	5	14	19
White	8	12	20
Whitley	9	22	31
	830	1,286	2,116

WIDAL EXAMINATIONS MADE WITH THE BLOOD OF SUSPECTED
TYPHOID FEVER CASES.

<i>Counties.</i>	<i>Positive.</i>	<i>Negative.</i>	<i>Unsatis- factory.</i>	<i>Total.</i>
Adams	1	5	..	6
Allen	8	29	..	37
Bartholomew	8	14	..	22
Benton	..	1	..	1
Blackford	5	..	..	5
Boone	..	2	..	2
Brown	..	..	..	..
Carroll	1	4	..	5
Cass	..	1	..	1
Clark	..	..	..	..
Clay	1	8	..	9
Clinton	3	7	..	10
Crawford	..	..	..	..
Davless	..	..	..	..
Dearborn	1	4	..	5
Decatur	3	3	..	6
Dekalb	..	..	..	..

WIDAL EXAMINATIONS—Continued.

<i>Counties.</i>	<i>Positive.</i>	<i>Negative.</i>	<i>Unsatisfactory.</i>	<i>Total.</i>
Delaware	..	2	..	2
Dubois	..	..	..	..
Elkhart	2	3	..	5
Fayette	2	2	..	4
Floyd	1	3	..	4
Fountain	3	2	..	5
Franklin	..	..	..	..
Fulton	..	..	..	..
Gibson	..	..	..	..
Grant	20	27	..	47
Greene	2	..	..	2
Hamilton	6	12	..	18
Hancock	2	5	..	7
Harrison	..	..	..	..
Hendricks	4	18	1	23
Henry	5	5	..	10
Howard	..	..	..	..
Huntington	..	1	..	1
Jackson	4	7	..	11
Jasper	2	2	..	4
Jay	2	1	..	3
Jefferson	2	5	..	7
Jennings	2	3	..	5
Johnson	5	3	..	8
Knox	2	2	..	4
Kosciusko	1	9	..	10
Lagrange	..	..	..	..
Lake	1	2	..	3
Laporte	17	20	..	37
Lawrence	..	..	..	..
Madison	4	24	1	29
Marion	80	145	2	227
Marshall	2	4	..	6
Martin	..	2	..	2
Miami	..	1	..	1
Monroe	..	..	..	..
Montgomery	2	3	1	6
Morgan	1	1	..	2
Newton	1	1	..	2
Noble	3	12	..	15
Ohio	..	..	..	..
Orange	..	..	..	..
Owen	..	3	..	3
Parke	..	1	..	1
Perry	2	7	..	9
Plke	..	..	..	..
Porter	..	1	..	1

WIDAL EXAMINATIONS—Continued.

<i>Counties.</i>	<i>Positive.</i>	<i>Negative.</i>	<i>Unsatisfactory.</i>	<i>Total.</i>
Posey	1	..	..	1
Pulaski	1	3	1	5
Putnam	3	3	..	6
Randolph	13	21	..	34
Ripley	..	..	..	..
Rush	2	..	..	2
Scott	..	..	..	..
Shelby	..	3	..	3
Spencer	9	21	..	30
Starke	2	4	..	6
Steuben	..	..	..	..
St. Joseph	2	4	..	6
Sullivan	..	2	..	2
Switzerland	..	1	..	1
Tippecanoe	3	7	..	10
Tipton	1	3	..	4
Union	1	1	..	2
Vanderburgh	3	2	1	6
Vermillion	..	1	..	1
Vigo	2	3	..	5
Wabash	..	..	..	..
Warren	..	..	..	..
Warrick	..	..	..	..
Washington	..	..	..	..
Wayne	14	23	..	37
Wells	2	2	..	4
White	1	2	..	3
Whitley	..	..	..	..
	271	523	8	802

DIPHTHERIA BY COUNTIES.

Adams	1	..	..	1
Allen	6	1	..	7
Bartholomew	..	1	..	1
Benton	17	30	1	48
Blackford	..	3	..	3
Boone	3	1	..	4
Brown	..	..	..	..
Carroll	..	1	..	1
Cass	1	..	..	1
Clark	..	1	..	1
Clay	6	6	1	13
Clinton	1	..	..	1
Crawford	..	..	..	..
Davless	..	1	..	1

[22—17549]

DIPHTHERIA—Continued.

<i>Counties.</i>	<i>Positive.</i>	<i>Negative.</i>	<i>Unsatisfactory.</i>	<i>Total.</i>
Dearborn	..	..	..	..
Delaware	71	55	2	128
Dubois	..	..	..	..
Elkhart	1	..	..	1
Fayette	..	..	..	..
Floyd	1	..	..	1
Fountain	..	..	..	..
Franklin	..	..	..	..
Fulton	..	..	..	..
Gibson	..	..	..	..
Grant	3	3	..	6
Greene	..	..	..	..
Hamilton	6	1	..	7
Hancock	3	..	..	3
Harrison	3	..	..	3
Hendricks	34	22	1	57
Henry	2	1	..	3
Howard	3	3	1	7
Huntington	4	1	..	5
Jackson	..	..	..	..
Jasper	2	1	..	3
Jay	..	..	..	..
Jefferson	3	3	..	6
Jennings	6	4	..	10
Johnson	..	..	..	..
Knox	5	..	..	5
Kosciusko	..	..	..	..
Lagrange	..	..	..	..
Lake	6	..	..	6
Laporte	..	3	..	3
Lawrence	3	2	..	5
Madison	16	11	2	29
Marion	37	46	1	84
Marshall	4	..	..	4
Martin	..	..	..	..
Miami	..	..	..	..
Monroe	..	1	..	1
Montgomery	3	5	..	8
Morgan	3	..	..	3
Newton	..	2	..	2
Noble	4	1	..	5
Ohio	..	..	..	..
Orange	..	..	..	..
Owen	..	..	..	..
Parke	3	1	..	4
Perry	..	..	..	..
Pike	..	..	..	..

DIPHTHERIA—Continued.

<i>Counties.</i>	<i>Positive.</i>	<i>Negative.</i>	<i>Unsatisfactory.</i>	<i>Total.</i>
Porter	..	..	..	..
Posey	3	4	2	9
Pulaski	..	..	..	..
Putnam	..	..	..	..
Randolph	11	14	2	27
Ripley	..	..	..	..
Rush	3	5	1	9
Scott	..	..	..	..
Shelby	..	..	..	..
Spencer	1	2	..	3
Starke	..	..	..	..
Steuben	1	..	..	1
St. Joseph	..	1	..	1
Sullivan	3	1	..	4
Switzerland	..	..	..	..
Tippecanoe	..	1	..	1
Tipton	12	4	..	16
Union	1	2	..	3
Vanderburgh	..	..	..	..
Vermillion	4	2	..	6
Vigo	..	1	..	1
Wabash	18	8	..	26
Warren	..	..	..	..
Warrick	..	..	..	..
Washington	..	..	..	..
Wayne	12	11	..	23
Wells	2	..	..	2
White	5	11	2	18
Whitley	..	2	..	2
	337	280	16	633

TOTAL NUMBER OF EXAMINATIONS.

Sputum	2,116
Typhoid	802
Diphtheria	633
Water	108
Milk	26
Anemia	2
Miscellaneous for T. B.	18
Miscellaneous	181
Malaria	45

3,989

Total number of outfits sent out..... 6,922

A study of the foregoing tables will show a difference in the number of specimens sent to the Laboratory of Bacteriology from different counties. The variations in this number are not altogether a result of different size or population of the respective counties, but rather depend upon the number of physicians in each county who make use of this Laboratory. It is to be remembered, however, that in Allen and Marion Counties the principal cities, Ft. Wayne and Indianapolis, have laboratories of their own.

We have tried during the two years since this Laboratory was created, to reach every physician in Indiana and invite his co-operation in the crusade against infectious diseases. The results have been especially satisfactory where we could meet the doctors personally and discuss the means which are best adapted to the needs of their respective communities. To meet the physicians personally, while it brings the best results and will do most to reduce the extent and frequency of epidemics in this State, has been made nearly impossible because of the limited number of employes in the Bacteriological Laboratory. If one of the number goes out to investigate an epidemic or to attend a medical meeting, the others must do more work than would tend toward accuracy. The character of the work done in this department is wholly different from that of any other line of business because in the majority of specimens submitted the life of the patient depends on the thoroughness with which the microscopical examination is conducted, the correctness of the diagnosis and speed with which results are reported to the physicians.

The tables of diphtheria by counties reveal a peculiar situation, the significance of which is of economic importance to this State. We refer to the fact that many counties are credited with more positives, i. e., specimens containing diphtheria bacilli, than those in which these bacteria were absent. This means that the health officers release patients from quarantine without making the attempt to determine with absolute certainty that the Klebs-Loeffler bacilli, which are the specific cause of diphtheria, have really disappeared from the nose and throat of every member of the infected household. This is a great mistake because we know that no one can tell merely by looking at a throat whether or not it contains Klebs-Loeffler bacilli. It is folly to suppose that every person in whose nose and throat these bacteria have found lodgment must necessarily develop the clinical symptoms of diphtheria. Physicians are too prone to consider a patient safe to be at large as soon as the inflammatory symptoms have subsided, and con-

stantly endanger their communities by releasing families from quarantine too early. There are several ways in which the State Laboratory of Bacteriology may help to solve the problem confronting the State of Indiana with regard to the prevention of infectious diseases. They are:

1. To communicate with every registered physician in this State and supply him with all the necessary outfits and instructions, when and how to send the specimens.

2. To have members of this department meet the physicians at their town and county societies to discuss the ways and means which will be best adapted to prevent infectious diseases in their localities.

3. To assist in the examination of school children in the public schools of any town or city, except such as have their own laboratories, immediately upon the detection of a case of diphtheria in a school.

4. To help in the education of the general public by occasional public demonstrations and exhibits of such character as will teach people to understand the nature of infectious diseases, their specific effects on the human body, and the best ways to prevent infection, the value of quarantine, etc. Such exhibits will be of use, not only to the laity, but also to the physicians and especially the health officers. When people realize that it is the infectious disease which the State Board of Health desires to put in quarantine and that all persons who have become the carriers of infection, regardless of the fact that they may apparently be in perfect health, must be prevented from spreading the disease.

STATISTICAL REPORT

FOR THE YEAR 1907.

REGISTRATION REPORT, 1907.

This report is for the calendar year 1907. The population figures are estimated from the census of 1900, according to the method of the United States Census Bureau.

In the following tables the causes of death are arranged according to the Bertillon classification, which has been adopted by all of the registration states of the country. This international classification was used by the United States Bureau of the Census in its last statistical compilation of causes of death.

Table 1 is a classification of all deaths with rates per 100,000 population, classified and arranged according to the international system.

Table 2 is a classification of deaths from all causes by months, ages, color, nationality and conjugal condition.

Table 3 gives deaths from all causes by counties, months, ages, color, nationality and conjugal condition.

Table 4 gives deaths from certain diseases by geographical sections and by counties.

Table 5 gives death rates for eight years, 1900 to 1908, with averages of cities of 5,000 population and over, compared with rural and state rates.

Table A gives births by counties, months, color and nationality of parents.

Table B gives births by counties, number of children born to each mother, grouped ages of parents, stillbirths, plurality and illegitimate births.

Table C gives, by counties, the marriages by months, color and nationality.

Table D gives, by counties, the marriages by grouped ages.

BIRTHS.

The number of births reported in the State of Indiana during the year 1907 was 49,112, of which number 25,627 were males and 23,485 females. Of the total males, 25,104 were white and 523 colored. Of the total females 22,995 were white and 490 colored. In the preceding year 45,300 births reported; males, 23,469; females, 21,831. October had the largest number of births, 4,544, and June the smallest, 3,203. March had the greatest number of deaths, 3,622, and June the lowest, 2,615. The births (49,112),

rate 18.0, exceed the deaths 36,461), rate 13.4 per 1,000 population.

The nationality of parents shows as follows: American-born fathers, 44,315; American-born mothers, 45,162. Foreign-born fathers, 3,284; foreign-born mothers, 2,268. Nationality not reported: Fathers, 1,017; mothers, 786.

Of the number of children born to each mother, 14,274 were first; 10,626, second; 7,575, third; 5,201, fourth; 3,677, fifth; 2,456, sixth; 1,760, seventh; 1,228, eighth; 751, ninth; 494, tenth; 291, eleventh; 274 were twelfth child and over, and 505 were not reported.

As to the ages of parents, 702 fathers and 5,276 mothers were under twenty years of age. In the age period of 50 to 60 there were 949 fathers and 19 mothers; age period 60 to 70, there were 126 fathers, and between 70 to 80 there were fifteen fathers.

One thousand two hundred and twenty-three stillbirths, also reported as deaths. The illegitimate births numbered 893, of which 469 were males, and 424 females. The plural births numbered 982, of which 532 were males and 450 females.

MARRIAGES.

Total marriages reported, 27,287. This is an increase over the preceding year of 1,062. October had the greatest number of marriages, 2,997, and March had the smallest number, 813. The general statistics on marriages will be found in Tables C and D.

DEATHS.

The total number of deaths reported in 1907 was 36,461, with a rate of 13.4. In the preceding year, 35,992 deaths, with a rate of 13.58. Males, 19,251; females, 17,210. White males, 18,402; colored, 759; white females, 16,509; colored, 701. American-born, 16,771 males, 15,443 females; foreign-born, 2,146 males, 1,588 females; nationality not reported, 334 males and 179 females. Single males, 8,773; females, 6,673; married males, 7,404; females, 5,884; widowed males, 2,741; females, 4,576; conjugal condition not reported, 303 males and 77 females.

The number of deaths, with rates for the years named, appear in the following table:

	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.
Deaths.....	35,516	36,544	34,069	33,892	37,240	36,502	35,992	36,461
Annual rate.....	14.1	14.5	13.5	13.4	14.0	13.7	13.5	13.4

Of the total number of deaths, 7,599, or 20.8 per cent. of the whole number, occurred in the first year of life. This is almost one-fourth of the total.

Two thousand two hundred and eighty-six deaths occurred in the age period of 1-5, making the total loss of children under 5 years of age, 9,885, or 27.3 per cent. of the total deaths. This is 20.0 per cent. of the total births reported. In the age period of 5 to 20 there were 2,371 deaths, or 6.5 per cent. of the total number. The total loss under 21 years of age is 12,256, or 33.6 per cent. of the total deaths. In the age period of 20 to 50, practically the prime of life, there were 8,173 deaths, or 22.4 per cent. of the total deaths. There were 402 deaths of persons over 90 years of age, an increase of 42 over 1906.

The following table, giving deaths by months, shows March with the greatest number of deaths, with January, February and August having about the same. June had the lowest number of deaths, as was the case in 1906:

Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
3,126	3,413	3,622	2,961	2,914	2,615	3,133	3,376	2,887	2,820	2,671	2,923

February, March and April had the most tuberculosis deaths; February had most pneumonia; July and August were highest with diarrhoeal diseases, and August had the greatest number of typhoid deaths.

PRINCIPAL CAUSES OF DEATH FOR LAST EIGHT YEARS, WITH AVERAGE.

The following table gives the principal causes of death in their numerical order, for the past eight years, and also the yearly average for each cause, and Chart No. 1 gives a graphic representation of the principal causes for 1907:

PRINCIPAL CAUSES OF DEATH IN INDIANA FOR LAST EIGHT YEARS WITH AVERAGE.

	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	Average.
1. Pulmonary tuberculosis.....	3,364	4,169	3,952	3,915	4,436	3,998	3,854	3,688	3,947
2. Pneumonia.....	2,744	3,384	2,758	2,634	3,487	3,124	2,690	3,258	3,035
3. Organic heart diseases.....	1,759	1,754	1,880	2,108	2,180	2,182	2,208	2,766	2,102
4. Accidents.....	1,334	1,463	1,391	1,601	1,622	1,795	1,796	1,981	1,623
5. Diseases of infants.....	1,361	1,247	1,183	1,318	1,726	1,908	1,766	1,783	1,536
6. Bright's disease.....	1,145	1,066	1,133	1,164	1,296	1,423	1,549	1,644	1,302
7. Infantile diarrhoea.....	2,049	1,776	1,779	1,449	1,629	1,700	1,823	1,639	1,718
8. Cerebral congestion and hemorrhage.....	1,056	1,264	1,272	1,346	1,435	1,351	1,496	1,599	1,352
9. Cancer.....	1,046	1,113	1,209	1,217	1,259	1,424	1,417	1,513	1,274
10. Typhoid fever.....	1,440	1,198	1,217	1,013	1,013	928	913	933	1,062
11. Other circulatory diseases.....	470	574	648	596	665	637	768	837	649
12. Paralysis.....	1,109	986	762	762	935	901	777	691	865
13. Influenza.....	424	1,049	302	348	434	591	224	666	504
14. Other forms of tuberculosis.....	1,281	493	440	477	542	494	602	634	620
15. Stomach diseases.....	676	704	641	613	561	678	699	617	648
16. Diarrhoea and enteritis.....	345	462	391	411	427	450	460	605	444
17. Broncho-pneumonia.....	228	480	417	416	672	535	576	585	488
18. Liver diseases.....	530	513	530	527	596	578	591	561	553
19. Other digestive diseases.....	666	662	605	519	530	498	524	491	564
20. Bronchitis.....	522	562	484	523	571	540	460	431	511
21. Simple meningitis.....	447	553	509	365	538	352	240	384	423
22. Sulcides.....	196	254	278	254	283	338	321	361	285
23. Diphtheria and croup.....	746	555	424	462	314	366	402	353	452
24. Malformations.....	242	180	162	152	172	167	284	266	203
25. Other genito-urinary diseases.....	274	243	390	437	229	194	228	266	282
26. Diabetes.....	111	204	197	197	226	231	269	252	210
27. Other respiratory diseases.....	298	370	352	276	325	285	276	242	303
28. Dysentery.....	323	263	277	211	184	218	235	242	244
29. Simple peritonitis.....	325	354	366	311	375	338	265	222	319
30. Convulsions of infants.....	381	406	339	335	345	306	254	221	323
31. Measles.....	85	161	67	73	212	6	23	213	105
32. Appendicitis.....	125	137	145	163	164	194	174	205	163
33. Rheumatism.....	265	184	209	220	266	253	274	185	231
34. Cerebrospinal meningitis.....	391	236	187	341	347	460	481	180	328
35. Acute nephritis.....	223	142	150	191	207	189	230	169	187
36. Skin diseases.....	261	124	181	129	140	179	170	164	168
37. Whooping-cough.....	287	181	164	148	94	136	157	136	163
38. Diseases of female genital organs.....	107	85	87	85	91	88	112	123	97
39. Homicides.....	27	48	36	62	48	85	93	122	65
40. Scarlet fever.....	141	149	150	164	192	133	101	91	140
41. Malaria.....	374	197	161	131	116	116	102	81	159
42. Smallpox.....	19	21	75	195	97	35	8	8	57
Total.....	29,208	29,965	27,880	27,909	30,981	30,404	30,092	31,608	29,724

INDIANA PRINCIPAL CAUSES OF DEATH

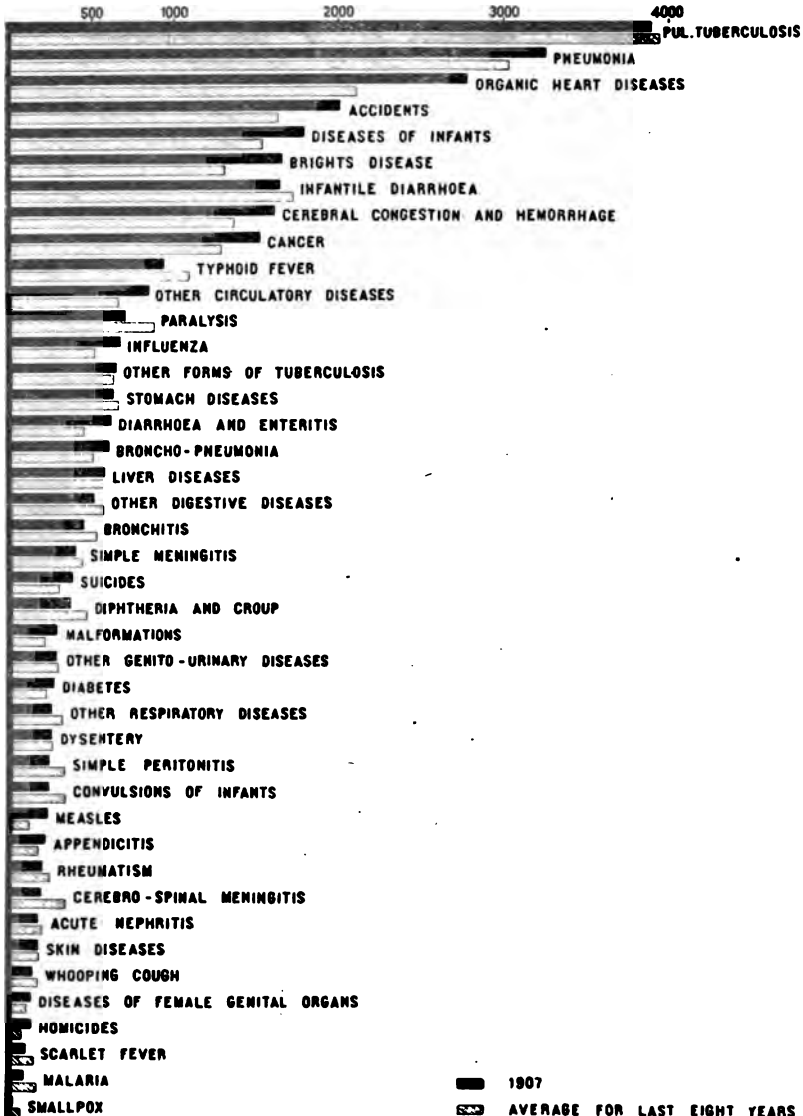


CHART 1

TUBERCULOSIS.

HAVOC WROUGHT BY CONSUMPTION IN INDIANA IN 1904, 1905, 1906, 1907.

	1904.	1905.	1906.	1907.
Total consumption deaths.....	4,978	4,492	4,456	4,471
Male deaths.....	1,807	1,745	1,675	1,964
Female deaths.....	3,171	2,793	2,771	2,328
Mothers, age 18 to 40, prime of life.....	867	967	917	826
Fathers, age 18 to 40, prime of life.....	490	315	256	343
Orphans made under 12 years of age.....	2,708	2,694	2,363	2,340
Homes invaded.....	3,396	3,307	3,283	3,849

TUBERCULOSIS, ALL FORMS.

Deaths by Months, with Average for Last Eight Years.

MONTHS.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	Average.
January.....	417	389	402	368	420	419	415	373	400
February.....	422	440	389	350	414	407	394	428	406
March.....	454	433	459	445	550	461	443	449	451
April.....	455	449	444	411	459	426	439	455	442
May.....	405	420	405	383	502	361	398	364	411
June.....	394	348	323	363	400	361	331	356	359
July.....	382	394	320	373	397	361	329	377	366
August.....	392	403	331	340	390	355	367	389	371
September.....	343	309	353	354	347	306	307	340	332
October.....	366	350	305	306	365	326	344	327	336
November.....	316	357	320	333	352	326	346	315	333
December.....	399	370	345	388	562	353	343	329	368
Totals.....	4,745	4,662	4,396	4,414	5,178	4,492	4,456	4,522	4,604

TUBERCULOSIS, ALL FORMS.

Deaths by Ages, with Average for Last Eight Years.

AGES.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	Average.
Under 1 year.....	155	135	113	109	144	106	126	132	127
1-2 years.....	74	62	68	59	99	85	62	85	74
2-3 years.....	42	34	31	24	42	26	38	48	35
3-4 years.....	23	23	17	23	25	18	31	24	23
4-5 years.....	12	17	12	14	13	11	24	28	16
5-10 years.....	69	63	51	64	68	63	64	58	62
10-15 years.....	90	99	98	92	126	97	106	93	100
15-20 years.....	532	417	401	436	501	449	411	400	443
20-25 years.....	690	718	672	707	725	697	681	667	694
25-30 years.....	627	595	596	572	614	574	577	573	591
30-35 years.....	457	519	464	491	509	464	464	467	464
35-40 years.....	388	386	346	374	436	419	375	341	383
40-45 years.....	346	310	311	267	316	273	242	253	289
45-50 years.....	269	248	235	225	286	245	260	270	264
50-55 years.....	218	185	224	217	232	222	221	226	218
55-60 years.....	209	190	181	193	206	153	171	190	186
60-65 years.....	185	200	153	166	189	165	170	179	176
65-70 years.....	159	171	155	143	152	165	162	180	161
70-75 years.....	124	118	124	116	136	122	122	136	125
75-80 years.....	78	81	76	74	75	72	96	104	82
80-90 years.....	36	42	38	30	47	34	35	48	36
90 years and over.....	2	2	1	2	3	4	4	3	2

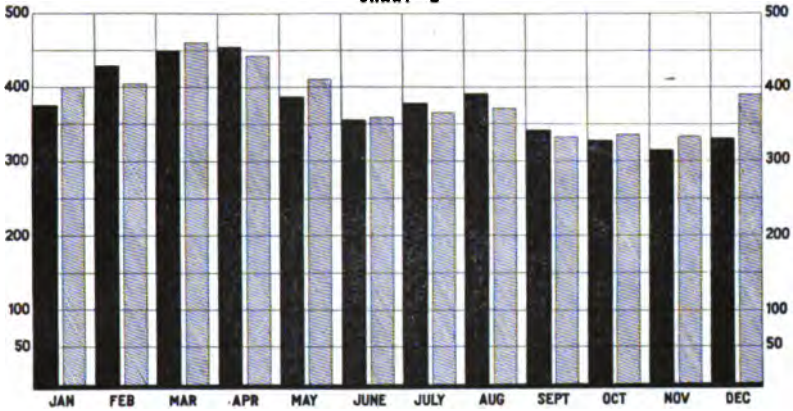
TUBERCULOSIS ALL FORMS

BY MONTHS

■ - 1907

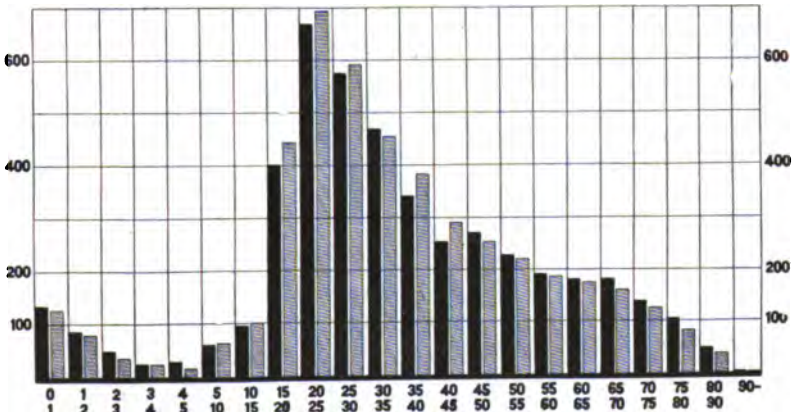
■ - AVERAGE FOR LAST EIGHT YEARS

CHART 2



BY AGES

CHART 3



PULMONARY TUBERCULOSIS.

Deaths by Months, with Average for Last Eight Years.

MONTHS.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	Average.
January.....	300	368	358	324	379	365	359	330	351
February.....	300	360	353	318	372	379	349	392	356
March.....	318	388	416	399	485	421	391	396	401
April.....	339	408	409	365	409	380	386	392	436
May.....	266	378	368	339	448	346	337	329	351
June.....	301	310	297	326	359	330	282	303	313
July.....	244	349	295	323	358	310	284	314	309
August.....	271	254	300	293	332	308	312	312	297
September.....	212	266	296	318	302	263	253	286	274
October.....	274	302	266	261	322	266	289	276	282
November.....	248	321	288	297	317	287	302	276	292
December.....	291	335	306	352	353	313	310	282	317
Totals.....	3,364	4,069	3,952	3,915	4,436	3,998	3,854	3,888	3,979

PULMONARY TUBERCULOSIS.

Deaths by Ages, with Average for Last Eight Years.

AGES.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	Average.
Under 1 year.....	43	76	59	53	72	53	60	63	59
1-2 years.....	13	35	33	28	48	37	27	31	31
2-3 years.....	9	14	16	11	23	13	19	19	15
3-4 years.....	3	12	7	10	14	10	10	6	9
4-5 years.....	3	7	6	7	9	3	8	10	6
5-10 years.....	31	28	28	35	32	37	31	29*	31
10-15 years.....	59	84	75	59	101	75	76	66*	74
15-20 years.....	318	389	373	393	457	411	359	356	382
20-25 years.....	543	676	626	666	687	650	625	623	637
25-30 years.....	491	559	553	535	582	538	535	517	538
30-35 years.....	338	490	435	461	486	437	429	430	428
35-40 years.....	289	356	329	343	412	385	342	318	346
40-45 years.....	252	287	299	244	271	254	220	234	257
45-50 years.....	199	223	225	213	262	219	231	238	226
50-55 years.....	158	174	196	194	209	200	196	197	190
55-60 years.....	155	166	166	175	186	139	155	165	168
60-65 years.....	131	182	140	151	175	151	145	153	153
65-70 years.....	113	148	137	123	137	154	147	163	140
70-75 years.....	92	105	112	107	121	111	103	126	109
75-80 years.....	50	73	70	67	65	66	76	88	69
80-90 years.....	29	37	36	25	39	28	31	43	33
90 years and over.....		2	1	1	3		4	1	1

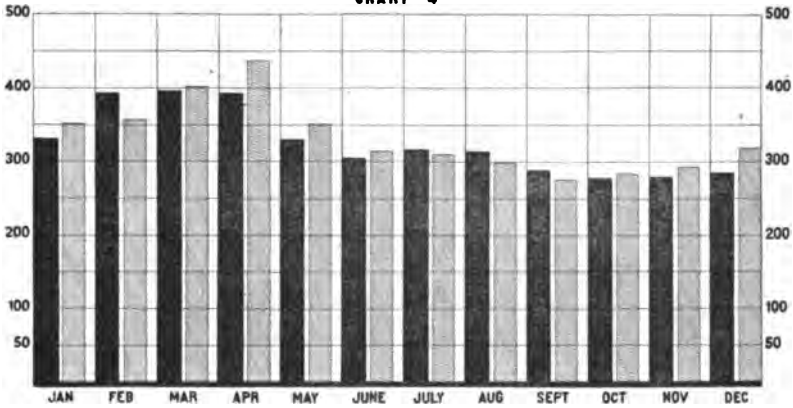
PULMONARY TUBERCULOSIS

BY MONTHS

■ - 1907

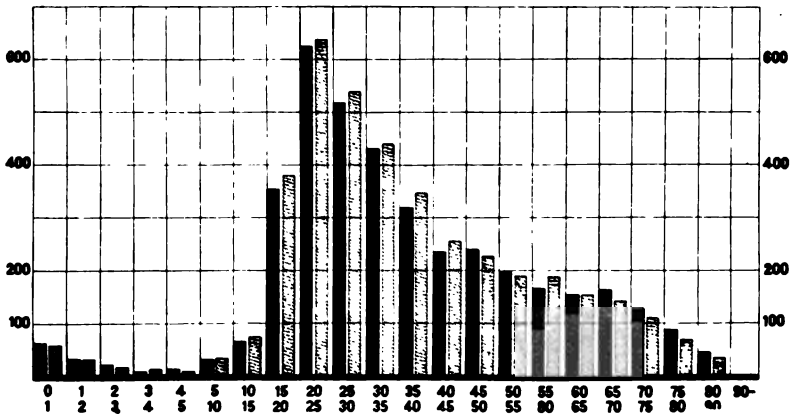
▨ - AVERAGE FOR LAST EIGHT YEARS

CHART 4



BY AGES

CHART 5



CONSUMPTION DEATH RATES PER 100,000 BY COUNTIES FOR 1907, IN INDIANA.

State rate, 166.5.

COUNTIES.	Tuber- culosis, All Forms.	COUNTIES.	Tuber- culosis, All Forms.
Adams.....	102.5	Lawrence.....	196.4
Allen.....	149.2	Madison.....	142.5
Bartholomew.....	186.7	Marion.....	286.7
Benton.....	55.6	Marshall.....	101.8
Blackford.....	202.4	Martin.....	149.8
Boone.....	176.6	Miami.....	146.2
Brown.....	137.0	Monroe.....	181.2
Carroll.....	88.3	Montgomery.....	219.3
Cass.....	157.6	Morgan.....	183.4
Clark.....	155.7	Newton.....	98.3
Clay.....	112.2	Noble.....	100.6
Clinton.....	151.5	Ohio.....	302.4
Crawford.....	302.9	Orange.....	186.3
Davies.....	183.3	Owen.....	181.3
Dearborn.....	134.0	Parke.....	143.0
Decatur.....	185.1	Perry.....	133.0
Dekalb.....	130.6	Pike.....	259.2
Delaware.....	147.1	Porter.....	30.0
Dubois.....	118.3	Posey.....	252.3
Elkhart.....	137.4	Pulaski.....	78.5
Fayette.....	101.8	Putnam.....	221.7
Floyd.....	136.5	Randolph.....	149.9
Fountain.....	202.0	Ripley.....	184.2
Franklin.....	154.8	Rush.....	191.2
Fulton.....	86.7	Scott.....	218.5
Gibson.....	157.3	Shelby.....	193.9
Grant.....	178.2	Spencer.....	108.1
Greene.....	168.9	Starks.....	89.9
Hamilton.....	136.3	Steuben.....	116.9
Hancock.....	205.7	St. Joseph.....	183.7
Harrison.....	107.8	Sullivan.....	135.6
Hendricks.....	171.9	Switzerland.....	295.3
Henry.....	164.4	Tippecanoe.....	141.5
Howard.....	168.4	Tipton.....	143.0
Huntington.....	136.3	Union.....	257.4
Jackson.....	237.7	Vanderburgh.....	176.1
Jasper.....	154.6	Vermillion.....	142.0
Jay.....	186.0	Vigo.....	149.8
Jefferson.....	280.7	Wabash.....	131.4
Jennings.....	214.2	Warren.....	145.8
Johnson.....	210.9	Warrick.....	137.8
Knox.....	134.2	Washington.....	126.6
Kosciusko.....	124.3	Wayne.....	259.9
Lagrange.....	84.8	Wells.....	136.5
Lake.....	120.8	White.....	69.8
Laporte.....	121.5	Whitley.....	104.0

MONTHLY ANALYSIS OF TUBERCULOSIS DEATHS.

January—The total number of deaths from tuberculosis was 349; of these 303 were of the pulmonary form. Of the total number 160 were males and 189 females. Of the males, 30 were fathers in the age period of 18-40 and left 67 orphans under 12 years of age. Of the females 68 were mothers in the age period of 18-40 and left 136 orphans under 12 years of age. We credit

consumption with the destruction of 98 fathers and mothers in the useful period of life and the production of 203 orphans. How many of these poor children will find their way into the orphan asylums can not be told. The homes invaded by the disease were 298. One hundred and eighty-eight of the total consumption deaths were in the age period of 15-40, which is 53 per cent.

February—The total number of deaths from tuberculosis was 406, and of these 369 were of the pulmonary form. Of the total number, 244 were females and 162 males. Of the males, 36 were fathers in the age period of 18-40 and left 73 orphans under 12 years of age. Of the females 82 were mothers in the age period of 18-40 and left 167 orphans under 12 years of age. Number of homes visited by the disease, 398. Total number of orphans produced, 240. Thirty-five deaths were under 15 years of age; 265 in the age period of 15-50, and the remainder were above 50.

March—The total number of deaths from tuberculosis was 431, and of these 373 were of the pulmonary form. Of the total number, 199 were males and 241 females. Of the males 33 were fathers in the age period of 18-40 and left 66 orphans under 12 years of age. Of the females 86 were mothers in the age period of 18-40 and left 176 orphans under 12 years of age. The number of homes visited by the disease was 392. The total number of orphans produced was 242. There were 297 consumption deaths in the age period of 15-50.

April—Total number of deaths from tuberculosis, all forms, were 424. Of these 363 were of the pulmonary form. Of the total number 195 were males and 229 females. Of the males 36 were fathers in the age period of 18-40 and left 75 orphans under 12 years of age. Of the females 77 were mothers in the same age period as above and left 167 orphans. The number of homes visited by the disease was 399. Total number of orphans produced 161. Two hundred and eighty-six deaths were in the age period of 15-50.

May—Total number of deaths from all forms, 363, 309 being pulmonary. Of the total number, 181 were males and 182 females. Of the males, 35 were fathers between the ages of 18-40 and left 72 orphans under 12 years of age. Of the females, 69 were mothers of the same age period as above and left 139 orphans under 12 years of age. Number of homes invaded, 351. Total number of orphans created, 201. Number of widows created, 35; number of widowers, 69.

June—The total number of deaths from tuberculosis, all forms, was 343, 294 being pulmonary. Of the total number, 153 were

males, and 190 females. Of the males, 22 were married and in the age period of 18-40 and left 47 orphans under 12 years of age. Of the females, 66 were married and in the same age period as above and they left 133 orphans under 12 years of age. Total orphans created by the disease under 12 years of age, 180. The number of homes invaded was 311.

July—Total number of deaths, 354. Fifty-six of these were other forms than pulmonary. Of the total number, 161 were males and 193 females. Of the males, 22 were married and were in the age period of 18 to 40, and they left 44 orphans under 12 years of age. Of the females, 68 were married and in the age period just named and they left 136 orphans under 12 years of age. The total number of orphans made by this disease in one month was 180. The total number of homes invaded, 354.

August—Total number of deaths 377, 305 pulmonary, 72 other forms. Of the total number, 176 were males and 201 females. Of the males, 38 were married and in the age period of 18-40, the prime of life, and they left 76 orphans under 12 years of age. Of the females, 86 were married in the same age period as above and left 172 orphans under 12 years of age. The total number of orphans was 248, and the homes invaded numbered 361. Four deaths occurred in the age period of 80-90.

September—Total number of deaths 325, 270 pulmonary, 55 other forms. Of the total number, 143 were males and 182 females. Of the males, 21 were married in the age period of 18-40 and left 42 orphans under 12 years of age. Of the females, 65 were married in the same age period as above and left 130 orphans under 12 years of age. Total number of orphans made by the disease this month, 172. Homes invaded, 309. Two deaths, male and female, occurred, 80-90 years of age. Nineteen, eight of whom were women, occurred in the age period of 70-80.

October—Total number of deaths 304, of which 256 were of the pulmonary form and 48 other forms. Of the total number, 144 were males and 160 females. Of the males, 18 were married in the age period of 18-40 and left 39 orphans under 12 years of age. Of the females 51 were married in the same age period as above and left 102 orphans under 12. The total number of orphans made by the disease this month was 141. Homes invaded, 287. Eighteen tuberculosis deaths occurred of people over 70 years of age.

November—The total number of deaths was 292, of which 254 were of the pulmonary form and 38 other forms. Of the total number, 134 were males and 168 females. Of the males, 53 were

married and in the age period of 18-40 and left 106 orphans under 12 years of age. Of the females, 21 were married in the same age period as above and left 146 orphans under 12 years of age. The total number of orphans made by the disease this month was 152; homes invaded, 271. As usual, the greatest destruction was in the useful period of life, 15-50, wherein 188, or 64 per cent. of the total, deaths occurred.

December—Total number of deaths 315, of which 268 were of the pulmonary form. The male deaths were 156, females 159. Of the males 30 were married, in the age period of 18-40, and left 60 orphans under 12 years of age. Of the females, 55 were married in the same age period as above and left 117 orphans under 12 years of age. Total number of orphans made by the disease this month 177. Homes invaded, 296. Of the 315 consumption deaths, 105, or 33.3 per cent., were in the age period of 15-50.

PNEUMONIA.

A slight decrease appears for pneumonia, inasmuch as the number of deaths for 1907 was 3,410, and the annual average for the last eight years is 3,445. In large cities pneumonia leads as a cause of death, but it is second to consumption in Indiana. The tables by months and by age periods, with their accompanying graphic charts, show the pneumonia status in this state.

PNEUMONIA.

Deaths by Months, with Average for Last Eight Years.

MONTHS.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	Average.
January.....	373	655	473	450	579	601	490	445	506
February.....	435	673	535	424	750	781	439	646	585
March.....	616	646	497	419	761	656	541	532	583
April.....	498	466	371	330	576	260	404	290	400
May.....	234	280	207	240	326	189	232	276	248
June.....	94	120	104	129	115	90	119	144	114
July.....	62	72	70	83	101	82	88	62	77
August.....	65	74	97	86	69	69	82	68	76
September.....	56	90	113	114	86	88	98	75	90
October.....	89	156	169	134	135	148	189	145	145
November.....	136	202	196	246	251	253	300	218	225
December.....	223	389	307	389	353	372	410	301	383
Totals.....	2,883	3,823	3,319	3,044	4,102	3,594	3,392	3,202	3,434

PNEUMONIA.

Deaths by Ages, with Average for Last Eight Years.

AGES.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	Average.
Under 1 year.....	542	758	692	703	919	898	714	639	733
1-2 years.....	206	248	246	216	326	251	262	209	245
2-3 years.....	113	123	113	107	145	97	127	96	115
3-4 years.....	53	73	47	57	87	63	67	57	63
4-5 years.....	40	46	39	34	53	28	46	29	39
5-10 years.....	82	120	93	102	145	90	91	65	96
10-15 years.....	64	66	55	57	72	71	50	40	59
15-20 years.....	85	139	93	88	128	89	95	63	97
20-25 years.....	95	130	107	83	108	83	77	84	96
25-30 years.....	92	119	86	72	98	79	89	90	91
30-35 years.....	91	115	96	58	104	90	86	87	91
35-40 years.....	104	121	80	78	114	107	104	96	100
40-45 years.....	89	142	104	77	105	98	106	88	101
45-50 years.....	107	110	87	103	137	106	112	100	107
50-55 years.....	116	159	118	89	137	130	130	143	127
55-60 years.....	107	179	112	132	136	140	137	125	138
60-65 years.....	181	218	142	164	195	173	155	172	175
65-70 years.....	162	244	205	172	225	237	216	215	209
70-75 years.....	163	246	192	202	261	270	229	243	225
75-80 years.....	162	191	200	192	268	226	232	238	213
80-90 years.....	195	216	181	204	271	237	232	280	227
90 years and over.....	25	24	27	42	28	25	33	25	25

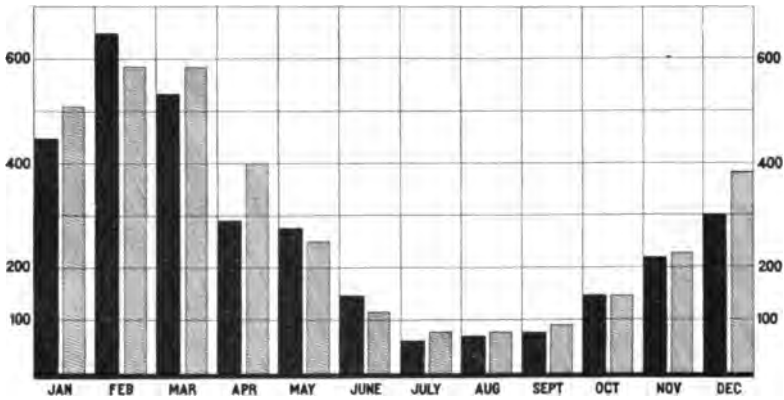
PNEUMONIA DEATHS

BY MONTHS

■ - 1907

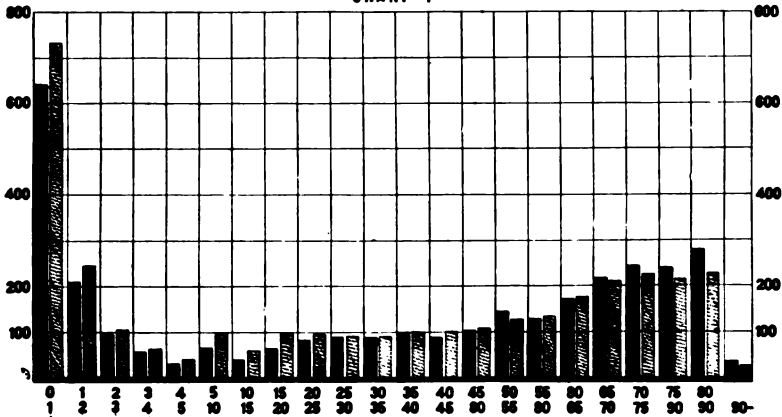
■ - AVERAGE FOR LAST EIGHT YEARS

CHART 6



BY AGES

CHART 7



MONTHLY ANALYSIS OF PNEUMONIA DEATHS.

January—Pneumonia caused 427 deaths. In the corresponding month last year, 415 deaths. Of the total number of deaths for 1907, 221 were males and 206 females. One hundred and eighty-seven of the deaths were under 20 years of age, 79 between 20 and 50, 167 over 50, and 2 were 90 and over.

February—Pneumonia caused 664 deaths. In the corresponding month last year, 403 deaths. In the preceding month, 427 deaths. There were 237 more deaths in February than occurred in January. Of the total pneumonia deaths, 325 were males and 339 females. It is quite unusual for females to lead in this disease. Of the total number, 204 were under 15 years of age, 128 between 15-50, and the remainder were over 50.

March—Pneumonia caused 575 deaths. This is a decrease over the preceding month of 89 deaths. In the corresponding month last year, 469 deaths. By this comparison, which is the right one, there is no improvement to be noted, as there is an increase of 107 deaths. Eighty of the deaths from pneumonia were under one year of age, 74 in the age period of 1-5, 65 between 5 and 30, 125 between 30 and 60, 72 in the age period of 60-70, 96 from 70-80, 57 from 80-90, and 6 over 90.

April—Pneumonia caused 284 deaths. In the corresponding month last year, 386 deaths, a decrease of 102. Forty-one pneumonia deaths were under 1 year of age, 53 between 15 and 50, and 119 over 50. Two over 90 years of age died from the malady.

May—Pneumonia caused 331 deaths. In the corresponding month last year, 213. By this comparison there is an increase of 118 deaths. Of the pneumonia deaths 59 were under 1 year of age, 65, 1-5; 5-20, 19; 20-50, 58; 50-70, 57; over 70, 73; over 90, 3.

June—Pneumonia caused 151 deaths. In the corresponding month last year, 111 deaths. Sixty-two pneumonia deaths were under 5 years of age; 6 were from 5-20; 20-50, 31; 50-80, 43; 80 and over, 14.

July—Pneumonia caused 84 deaths. In the preceding month, 151. In the corresponding month last year, 85. Of the pneumonia deaths, 34 were under 20 years; 15 in the age period of 20-50; 30 in the age period of 50-80; 80 and over, 5.

August—Total number of deaths, 66. In the corresponding month last year, 79. Of the pneumonia deaths, 14 were under one year of age; 11 were 1-10; 10-20, 7; 20-50, 6; 50-80, 24; 80 and over, 7. Of the total number of deaths from pneumonia, 31 were males and 35 females.

September—Total number of deaths, 93. In the corresponding month last year, 93. Of the pneumonia deaths, 13 were under one year of age; 1-5, 13; 5-20, 5; 20-40, 15; 40-60, 13; 60-80, 27. Of the total deaths, 52 were males and 41 females.

October—The total number of deaths from pneumonia was 160. In the corresponding month last year, 176. Of the pneumonia deaths, 99 were males and 71 females. There were 29 deaths under one year of age, 25 in the age period of 1-5.

November—There were 245 deaths reported. In the corresponding month last year, 302. In the preceding month, 160. Of the total number, 132 were males and 113 females. By age periods the pneumonia deaths were: Under 1, 45; 1-5, 23; 5-20, 16; 20-40, 29; 40-60, 36; 60-80, 71; 80 and over, 25.

December—There were 334 deaths reported. In the corresponding month last year, 408. In the preceding month, 245. Of the total number, 171 were males and 163 females. Fifty-four were in the age period of 1-20; 47 in the age period of 20-50; 162 were 50 and over. Two pneumonia deaths occurred in persons over 90 years of age.

TYPHOID FEVER.

The typhoid fever deaths in 1907 numbered 933, which is a slight decrease as compared with the annual average, 1,079, for the last eight years. As shown in the tables herewith, and by the graphic charts drawn therefrom, typhoid has gradually fallen since 1900. The last five months of the year show more deaths from typhoid than the seven preceding months.

TYPHOID FEVER.

Deaths by Months, with Average for Last Eight Years.

MONTHS.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	Average.
January.....	109	74	66	61	36	511	39	72	63
February.....	52	50	37	53	55	35	29	57	46
March.....	40	49	41	55	62	34	40	48	46
April.....	39	41	45	45	61	26	32	38	41
May.....	44	35	31	39	55	23	39	42	39
June.....	27	27	28	42	58	48	29	30	35
July.....	65	81	88	64	70	57	52	58	67
August.....	144	148	176	120	107	121	96	145	132
September.....	245	198	237	193	138	203	155	141	188
October.....	323	222	225	165	167	154	168	143	196
November.....	208	185	155	104	137	101	148	84	140
December.....	144	88	88	72	67	65	86	75	85
Totals.....	1,440	1,198	1,217	1,013	1,013	928	913	933	1,079

TYPHOID FEVER.

Deaths by Ages, with Average for Last Eight Years.

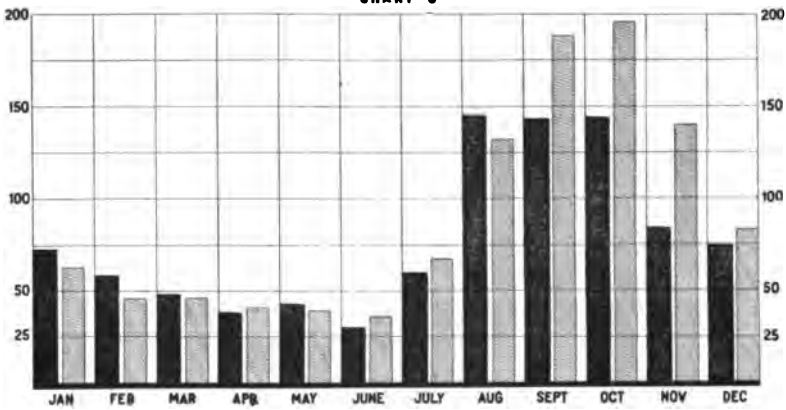
AGES.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	Average.
Under 1 year.....	13	15	9	4	16	11	12	8	11
1-2 years.....	14	14	15	13	11	14	11	7	12
2-3 years.....	18	12	28	12	18	16	13	13	16
3-4 years.....	26	18	19	17	8	11	19	13	16
4-5 years.....	22	19	20	16	16	18	18	10	17
5-10 years.....	105	91	77	77	74	72	65	58	77
10-15 years.....	136	87	98	102	82	74	85	92	94
15-20 years.....	229	178	167	160	133	125	138	145	159
20-25 years.....	193	177	169	136	137	136	120	126	149
25-30 years.....	120	146	139	102	89	94	94	94	109
30-35 years.....	106	78	117	62	73	64	76	79	82
35-40 years.....	98	70	69	62	73	45	62	67	68
40-45 years.....	71	75	73	49	47	49	34	46	55
45-50 years.....	52	49	58	45	49	46	37	41	47
50-55 years.....	34	34	37	33	45	32	36	32	36
55-60 years.....	50	36	31	35	37	31	22	24	33
60-65 years.....	28	33	22	18	42	30	18	28	27
65-70 years.....	28	25	25	21	22	20	16	16	21
70-75 years.....	25	24	21	19	18	19	10	17	19
75-80 years.....	16	5	13	12	10	9	15	10	11
80-90 years.....	9	8	4	11	7	8	8	5	7
90 years and over.....				1					

TYPHOID FEVER DEATHS BY MONTHS

■ - 1907

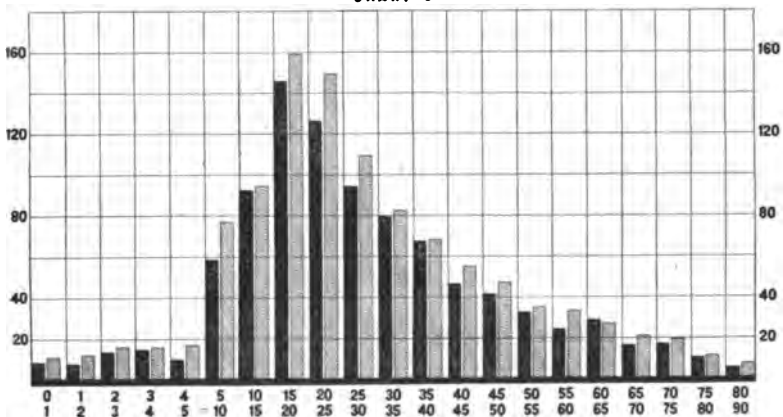
▨ - AVERAGE FOR LAST EIGHT YEARS

CHART 8



BY AGES

CHART 9



MONTHLY ANALYSIS OF TYPHOID FEVER DEATHS.

January—Typhoid fever, 688 cases were reported from 50 counties, with 65 deaths. In the corresponding month last year, 350 cases from 52 counties, with 33 deaths. The disease was epidemic in the following counties: Boone, Clark, Daviess, Dearborn, Dekalb, Hamilton, Marion, Miami, Putnam, St. Joseph, Switzerland, Vanderburgh.

February—There were 312 cases of typhoid fever reported from 45 counties, with 46 deaths. The corresponding month last year, 117 cases from 38 counties, with 29 deaths. Here is a decided increase. In the preceding month, 688 cases, with 65 deaths in 50 counties. The disease was epidemic in Clinton and Dekalb counties.

March—Three hundred and four cases of typhoid fever were reported from 33 counties, with 35 deaths. Number of deaths in corresponding month last year, 15. The disease was epidemic in the following counties: Boone, Clark, Dekalb, Lagrange and Laporte.

April—Two hundred and eighty cases of typhoid were reported from 37 counties, with 38 deaths. In the corresponding month last year, 211 cases from 62 counties, with 34 deaths. The disease prevailed unusually, but was not epidemic in the following counties: Clark, 7 cases; Dearborn, 8; Laporte, 11; Marion, 12; Vanderburgh, 16; Vigo, 10; Washington, 15.

May—Two hundred and four cases of typhoid reported from 31 counties, with 32 deaths. In the corresponding month last year, 194 cases in 32 counties, and 40 deaths. The following counties reported five cases and over: Bartholomew, 10 cases, no deaths; Clark, 11 cases, 2 deaths; Daviess, 7 cases, no deaths; Floyd, 13 cases, 1 death; Lake, 6 cases, 3 deaths; Marion, 10 cases, 3 deaths; Vigo, 11 cases, 4 deaths.

June—Two hundred and ninety-eight cases of typhoid fever reported in 37 counties, with 25 deaths. In the corresponding month last year 301 cases, 39 counties, with 29 deaths. The disease prevailed unusually in the following counties: Clark, 8 cases; Grant, 8; Lake, 12; Vigo, 16, and Warrick, 9.

July—There were 312 cases in 64 counties, with 53 deaths from typhoid fever. In the corresponding month last year there were 180 cases in 55 counties, with 62 deaths. The disease was epidemic in the following counties: Clark, 10; Dearborn, 10; Delaware, 15; Johnson, 10; Lake, 15; Marion, 16; Scott, 12; Vanderburgh, 21; Vermillion, 10; Vigo, 11; Warrick, 10.

August—Seven hundred and twenty-eight cases of typhoid fever were reported in 79 counties, with 131 deaths. In the corresponding month last year, 446 cases in 68 counties, with 98 deaths. This considerable increase can not be considered encouraging, after the people have been taught by circulars, by numerous newspaper articles, by Board of Health lectures, and by warnings of doctors as to where typhoid comes from and its prevention. The disease exists in epidemic form in the following counties: Allen, Daviess, Decatur, Delaware, Floyd, Jackson, Johnson, Lake, Knox, Madison, Marion, Scott, Sullivan and Vanderburgh.

September—Six hundred and forty-two cases of typhoid fever reported in 76 counties, with 133 deaths. In the corresponding month last year 977 cases in 76 counties, with 143 deaths. This comparison shows a slight decrease. The disease existed in epidemic form in the following counties: Allen, Blackford, Daviess, Dearborn, Decatur, Dekalb, Delaware, Fayette, Franklin, Grant, Hancock, Jackson, Jennings, Knox, Marion, Noble, Parke, Randolph, Sullivan, Vanderburgh, Warrick and White.

October—Five hundred and sixty-two cases of typhoid fever reported in 73 counties. We feel confident the disease existed in every one of the 92 counties. Number of deaths, 144. In the corresponding month last year, 732 cases in 73 counties, with 150 deaths. In the preceding month, 642 cases in 76 counties, with 133 deaths. The disease existed in epidemic form in the following counties: Clark, 12 cases; Daviess, 18; Clinton, 10; Dearborn, 12; Fayette, 20; Knox, 16; Lawrence, 10; Morgan, 14, and Warrick, 13.

November—Four hundred and forty cases of typhoid fever reported from 60 counties, with 76 deaths. In the corresponding month last year, 790 cases reported in 73 counties, with 135 deaths. Adams county reports 12 cases, 2 deaths. This amounts to an epidemic for a population of a little over 23,000. Clark reports 9 cases, with 2 deaths, which is also an epidemic in a population of 32,000. Knox reports 20 cases, with 2 deaths, an epidemic in a population of 35,000.

December—Three hundred and eighteen cases of typhoid fever in 47 counties, with 69 deaths. In the corresponding month last year, 674 cases in 50 counties, with 79 deaths. The disease seemed not to be epidemic, except perhaps in Parke county, from whence 11 cases were reported.

DIPHTHERIA.

Diphtheria caused 353 deaths in 1907, or 95 less than the average (448) for the last eight years. January was the most fatal month and June the least fatal.

The tables giving the number of deaths by months and by ages, follow herewith:

DIPHTHERIA.

Deaths by Months, with Average for Last Eight Years.

MONTHS.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	Average.
January.....	90	110	49	61	51	32	33	43	58
February.....	70	61	35	49	35	31	23	41	43
March.....	68	39	32	27	29	27	26	35	35
April.....	30	29	27	22	32	13	16	27	24
May.....	14	23	30	12	22	13	8	20	17
June.....	13	23	16	16	18	8	12	10	14
July.....	15	15	7	15	10	16	11	15	13
August.....	40	24	21	23	12	15	13	20	21
September.....	64	38	39	35	11	34	36	35	36
October.....	111	74	48	69	21	82	77	36	64
November.....	125	56	63	77	35	41	82	37	64
December.....	105	62	57	56	38	54	65	34	59
Totals.....	745	554	424	462	314	366	402	353	448

DIPHTHERIA.

Deaths by Ages, with Average for Last Eight Years.

AGES.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	Average.
Under 1 year.....	52	60	51	50	28	23	26	20	38
1-2 years.....	73	58	36	59	47	35	45	34	48
2-3 years.....	106	65	61	56	33	48	51	35	57
3-4 years.....	94	80	39	64	46	53	47	51	59
4-5 years.....	76	53	45	46	22	41	58	30	46
5-10 years.....	230	143	122	141	99	114	124	127	137
10-15 years.....	70	51	46	28	26	28	35	32	39
15-20 years.....	24	23	14	9	5	10	10	7	12
20-25 years.....	4	7	1	3	1	7	1	8	4
25-30 years.....	1	3	1		1	3		3	1
30-35 years.....	2	1	1	2	1	1		1	1
35-40 years.....	1	3			1	1	1	2	1
40-45 years.....		1	1				2	2	1
45-50 years.....		1						1	
50-55 years.....		2			1		1		
55-60 years.....	2			1		2		1	
60-65 years.....			1						
65-70 years.....	2	1		1					
75-80 years.....				1					

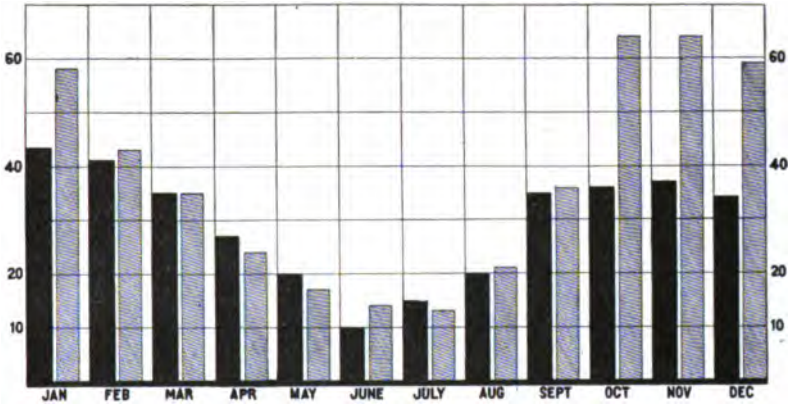
DIPHTHERIA DEATHS

BY MONTHS

■ - 1907

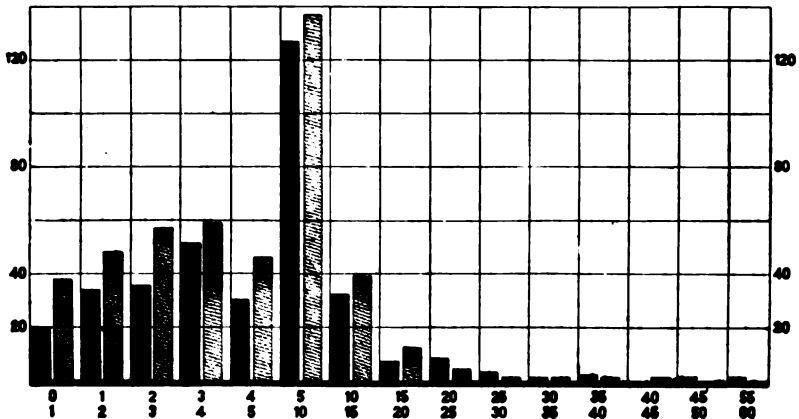
■ - AVERAGE FOR LAST EIGHT YEARS

CHART 10



BY AGES

CHART 11



SCARLET FEVER.

Scarlet fever caused 91 deaths in 1907, or 45 less than the average annual number of deaths for the last eight years.

The tables given herewith and the graphic charts drawn from them, show the scarlet fever situation in Indiana :

SCARLET FEVER.

Deaths by Months, with Average for Last Eight Years.

MONTHS.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	Average.
January.....	17	24	22	22	24	18	11	6	18
February.....	15	18	19	13	24	11	9	9	14
March.....	17	27	18	10	33	20	12	18	19
April.....	16	18	11	9	22	21	7	9	14
May.....	12	9	5	4	15	11	7	5	8
June.....	9	12	3	6	9	4	10	3	7
July.....	2	5	6	13	4	14	7	10	7
August.....	1	5	6	8	6	6	3	5	5
September.....	5	4	8	13	7	5	6	3	6
October.....	14	3	19	16	12	5	8	7	10
November.....	13	10	24	18	17	11	14	8	14
December.....	20	14	9	34	19	7	7	8	14
Totals.....	141	149	150	166	192	133	101	91	126

SCARLET FEVER.

Death by Ages, with Average for Last Eight Years.

AGES.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	Average.
Under 1 year.....	7	7	11	13	13	10	5	4	8
1-2 years.....	17	14	13	9	27	18	13	7	14
2-3 years.....	22	29	17	17	33	20	10	15	20
3-4 years.....	20	18	24	22	25	17	15	13	19
4-5 years.....	18	22	14	19	18	14	10	7	15
5-10 years.....	42	37	43	55	61	38	27	31	41
10-15 years.....	7	8	14	19	11	11	8	8	10
15-20 years.....	4	4	3	3	2	1	2	5	3
20-25 years.....	1	2	3	3	1	1	10	.....	2
25-30 years.....	.....	3	1	.....	.....	2	.....	1	1
30-35 years.....	.....	1	1	1	.....	.....	1	.....	.....
40-45 years.....	.....	.....	.....	1	.....	.....	.....	.....	.....
45-50 years.....	.....	1	.....	.....	1	1	.....	.....	.....
50-90 years.....	.....	.....	.....	1	.....	.....	.....	.....	.....

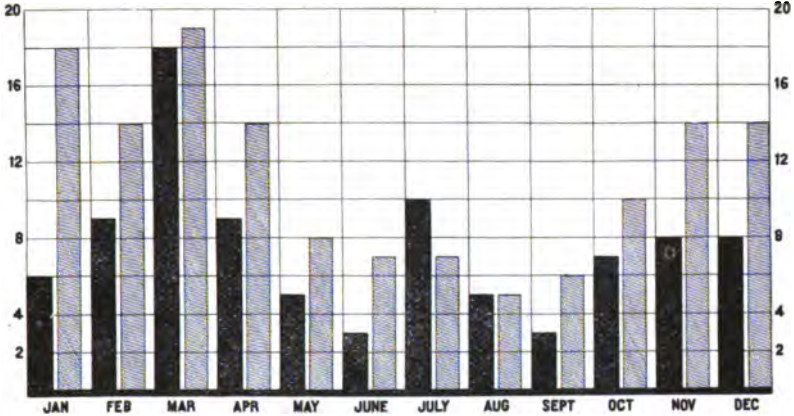
SCARLET FEVER DEATHS

BY MONTHS

■ - 1907

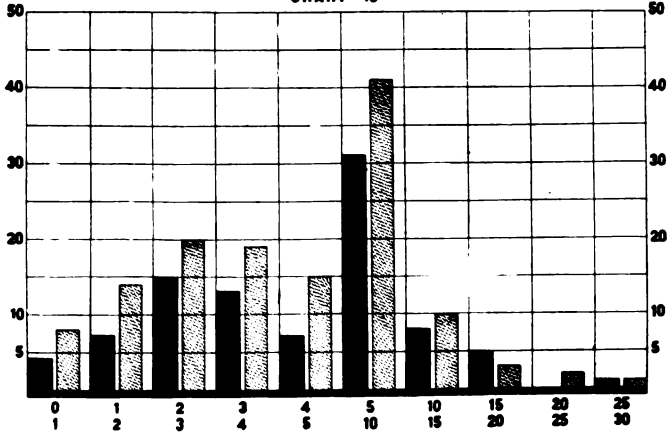
■ - AVERAGE FOR LAST EIGHT YEARS

CHART 12



BY AGES

CHART 13



DIARRHOEAL DISEASES.

The cases of diarrhoeal disease under two years of age numbered 1,639 for 1907.

The tables and charts show the status of the disease under the conditions and for the periods and ages stated:

DIARRHOEAL DISEASES—UNDER FIVE YEARS OF AGE.

Deaths by Months, with Average for Last Eight Years.

MONTHS.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907. Under 2 years.	Average.
January.....	19	14	15	11	29	26	28	24	22
February.....	11	12	14	22	30	30	25	32	22
March.....	21	17	14	20	33	36	29	35	25
April.....	13	26	21	17	24	22	39	18	22
May.....	32	19	29	25	29	35	42	35	30
June.....	111	81	116	83	54	116	71	81	89
July.....	480	468	455	323	307	359	321	396	388
August.....	627	500	569	475	498	469	484	503	515
September.....	436	393	337	275	344	343	447	250	357
October.....	198	167	130	140	204	186	232	160	177
November.....	80	64	56	36	49	54	66	40	55
December.....	21	15	23	28	28	24	29	25	24
Totals.....	2,049	1,776	1,779	1,449	1,629	1,700	1,823	1,639	1,726

DIARRHOEAL DISEASES—FIVE YEARS OF AGE AND OVER.

Deaths by Months, with Average for Last Eight Years.

MONTHS.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907. Under 2 years.	Average.
January.....	27	30	25	24	30	32	26	40	29
February.....	22	22	23	20	38	29	36	33	28
March.....	32	24	28	27	37	42	35	41	33
April.....	21	17	28	23	28	27	41	38	28
May.....	26	28	30	40	33	28	30	29	30
June.....	15	31	25	36	30	44	29	63	34
July.....	139	130	129	93	73	87	78	150	109
August.....	137	169	170	131	110	152	119	203	149
September.....	118	123	86	116	104	94	130	122	111
October.....	69	72	59	64	63	67	92	62	68
November.....	36	39	28	26	32	28	39	42	35
December.....	26	42	27	22	33	28	40	24	30
Totals.....	668	727	669	622	611	658	695	847	684

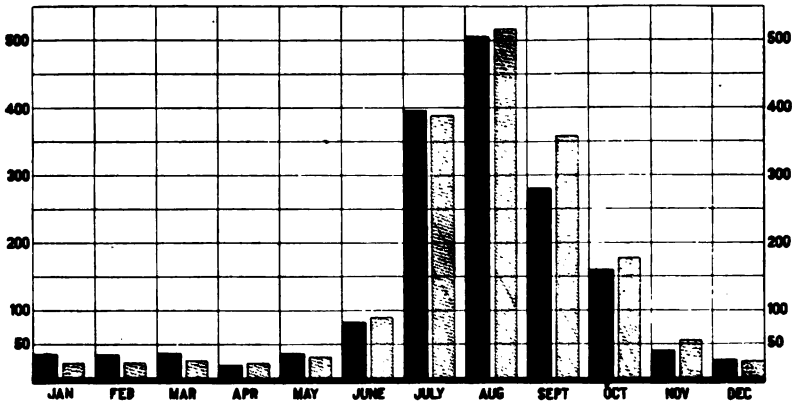
DIARRHOEAL DISEASES

BY MONTHS

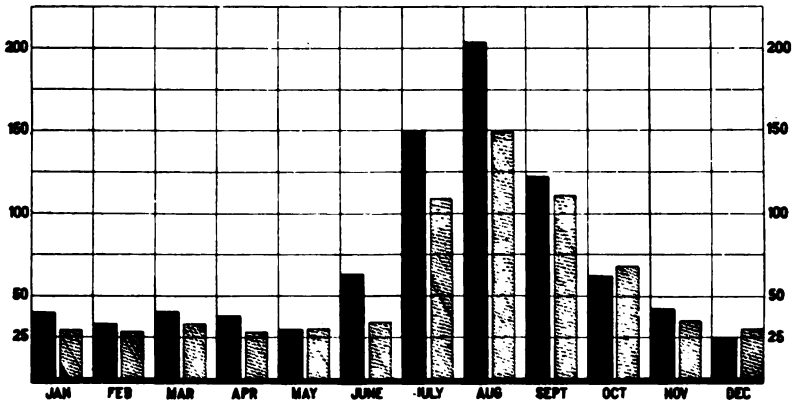
■ - 1907

▨ - AVERAGE FOR LAST EIGHT YEARS

UNDER TWO YEARS OF AGE
CHART 14



TWO YEARS AND OVER
CHART 15



DIARRHOEAL DISEASES.

Deaths by Ages, with Average for Last Eight Years.

AGES.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	Average.
Under 1 year.....	1,305	1,118	1,070	894	1,068	1,115	1,240	1,202	1,126
1-2 years.....	534	513	533	421	384	406	417	437	455
2-3 years.....	152	139	140	110	112	170	116	105	125
3-4 years.....	44	28	34	19	40	36	31	33	33
4-5 years.....	34	17	13	11	21	13	20	11	17
5-10 years.....	25	36	23	12	31	29	17	19	24
10-15 years.....	1	9	8	11	13	10	6	12	8
15-20 years.....	8	13	7	6	4	8	8	4	7
20-25 years.....	11	15	14	9	15	17	12	16	13
25-30 years.....	9	13	15	12	13	16	21	7	13
30-35 years.....	9	32	12	20	14	10	10	10	14
35-40 years.....	19	18	28	14	15	22	17	20	19
40-45 years.....	22	13	14	15	19	20	19	13	17
45-50 years.....	21	22	20	24	19	13	14	13	18
50-55 years.....	31	31	30	36	33	25	30	30	30
55-60 years.....	43	46	57	37	37	51	37	35	43
60-65 years.....	63	62	60	45	57	72	59	61	59
65-70 years.....	77	91	73	67	68	68	90	78	76
70-75 years.....	82	70	80	98	88	93	99	97	88
75-80 years.....	69	83	98	91	88	85	107	117	93
80-90 years.....	94	107	102	94	89	104	124	141	107
90 years and over.....		22	11	14	12	13	18	20	13

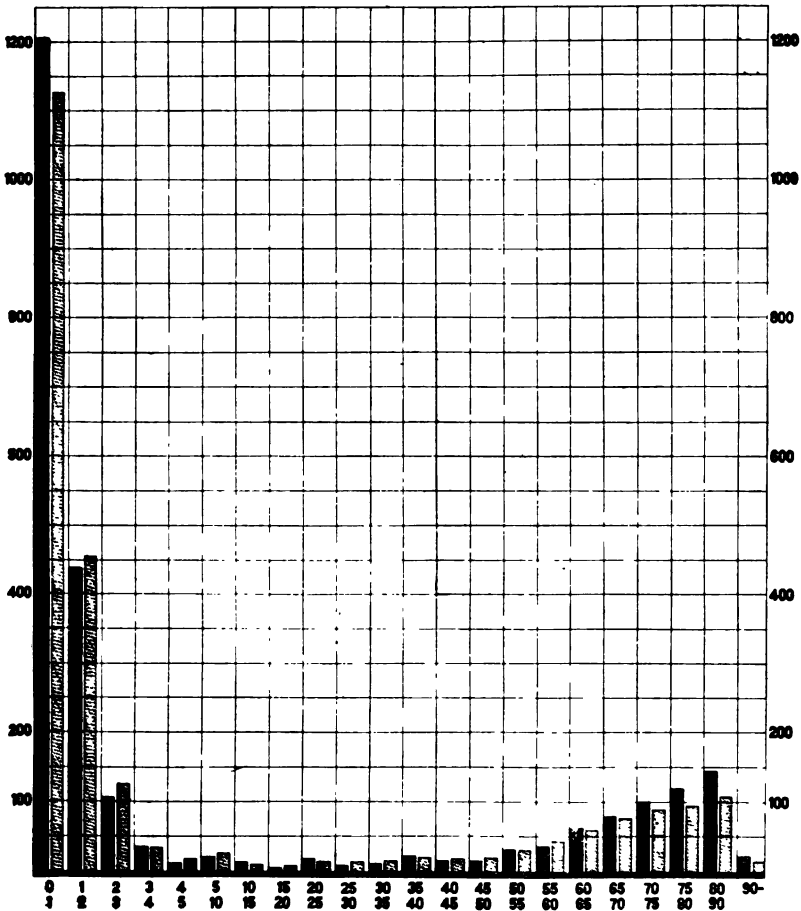
DIARRHOEAL DISEASES

BY AGES

■ - 1907

■ - AVERAGE FOR LAST EIGHT YEARS

CHART 16



INFLUENZA.

Influenza caused 666 deaths in 1907, which is a large increase as compared with the average (498) for the last eight years. The disease existed, but not in epidemic form, in every county of the state, and deaths occurred in every county in the state except Starke, Whitley and Warren. The tables and charts herewith show the status of the disease:

INFLUENZA.

Deaths by Months with Average for Last Eight Years.

MONTHS.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	Average
January.....	53	269	60	31	45	114	53	71	85
February.....	70	349	84	51	90	221	44	159	133
March.....	98	180	51	87	145	151	48	234	124
April.....	101	128	37	60	70	37	30	51	64
May.....	34	42	15	37	20	15	7	52	27
June.....	19	12	4	10	7	7	2	14	9
July.....	12	9	8	7	2	5	4	7	6
August.....	4	10	3	9	5		2	4	4
September.....	1	3	7	3	1	4	3	4	3
October.....	13	5	8	7	4	4	8	2	6
November.....	8	12	8	10	18	12	11	17	12
December.....	11	30	17	36	26	21	12	51	25
Totals.....	424	1,049	302	348	434	591	224	666	4:8

INFLUENZA.

Deaths by Ages, with Average for Last Eight Years.

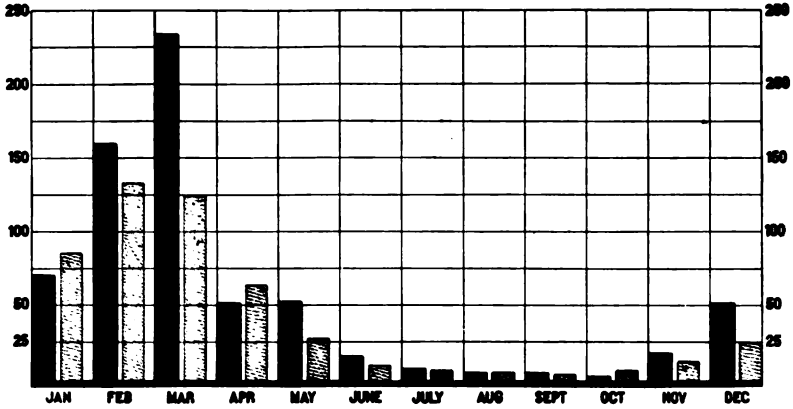
AGES.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	Average.
Under 1 year.....	35	66	47	13	32	43	14	26	34
1-2 years.....	7	14	7	3	4	10	3	12	7
2-3 years.....	3	11	4	3	1	6	5	5	4
3-4 years.....	1	5	4	2	4			3	2
4-5 years.....	2	4	4	2		1	2		1
5-10 years.....	7	11	9	2	3	5	2	4	4
10-15 years.....	2	6	4	6	7	4	3	6	4
15-20 years.....	3	12	3	3	6	7	4	11	6
20-25 years.....	5	20	4	4	3	16	3	11	8
25-30 years.....	13	22	2	5	8	3		5	7
30-35 years.....	7	22	2	5	7	9	2	18	9
35-40 years.....	9	27	6	5	7	9	4	14	10
40-45 years.....	17	33	1	6	6	16	3	9	11
45-50 years.....	17	33	6	7	13	14	10	23	15
50-55 years.....	8	43	12	16	9	17	13	26	18
55-60 years.....	15	41	14	16	19	12	6	78	22
60-65 years.....	23	57	5	28	22	40	11	24	26
65-70 years.....	47	103	35	27	37	47	24	73	49
70-75 years.....	59	159	35	53	73	67	31	94	71
75-80 years.....	55	151	39	58	61	86	31	89	71
80-90 years.....	83	180	51	74	94	132	43	151	101
90 years and over.....		26	7	9	15	23	8	23	14

INFLUENZA DEATHS BY MONTHS

■ - 1907

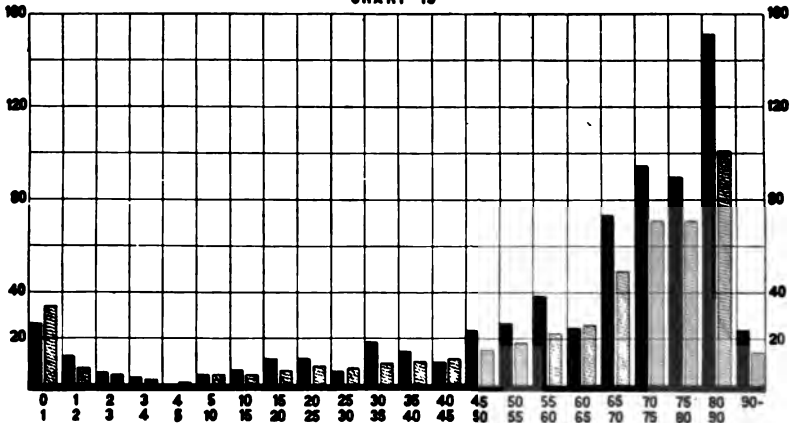
■ - AVERAGE FOR LAST EIGHT YEARS

CHART 17



BY AGES

CHART 18



SMALLPOX.

This disease prevailed throughout the year, but usually in very mild form. The deaths numbered 8, and the deaths numbered 8 in the preceding year, 1906. The smallpox deaths occurred, 1 in Howard county, 2 in Miami county, 1 in Pulaski county, 2 in St. Joseph county, 2 in Marion county.

SMALLPOX.

Table Giving Number of Deaths by Months for Last Eight Years.

MONTHS.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	Total.	Average for Eight Years.
January.....	1	2	4	51	8	7		3	76	9
February.....	4	2	2	55	5	11		2	81	10
March.....	2	4	3	31	3	3			46	5
April.....	3	1	8	21	6	3	1	1	44	5
May.....	2	3	1	10	7	3		1	27	3
June.....	2	3	2	3	3	4		1	18	2
July.....	3	1	15	4	6	3	1		33	4
August.....			1	14	3				18	2
September.....	2	1	7	2	17		2		31	4
October.....		2	10		18		3		33	4
November.....		1	4	1	13				19	2
December.....		1	18	2	8	1	1		32	4
Totals.....	19	21	75	195	97	35	8	8	458	54

MONTHLY ANALYSIS OF SMALLPOX.

January—There were 232 cases of smallpox reported from 15 counties, with 3 deaths. In the corresponding month last year, 80 cases in 10 counties, and no deaths. The following counties reported the disease as present: Clark, 1 case; Elkhart, 2 cases; Grant, 17; Hendricks, 1; Howard, 1; Jefferson, 40; Jennings, 2; Marion, 35 and 2 deaths; Marshall, 6 cases; Miami, 81 cases, 1 death; Monroe, 2 cases; Pulaski, 2; St. Joseph, 21; Vigo, 1; Wells, 1.

February—Two hundred and forty-one cases of smallpox, with 1 death, reported from 25 counties. The following counties reported the disease present: Cass, 1 case; Clark, 1; Dekalb, 5; Elkhart, 8; Floyd, 2; Jefferson, 40; Jennings, 10; Knox, 1; Lake, 1; Marion, 4; Marshall, 9; Miami, 64, with 1 death; Morgan, 20 cases; Noble, 1; Pulaski, 1; Scott, 1; St. Joseph, 23; Tippecanoe, 11; Wabash, 3; Wells, 2.

March—Two hundred and twenty-one cases of smallpox, with no deaths, reported from 20 counties. The following counties reported the disease present: Allen, 3 cases; Cass, 3; Dekalb, 7; Delaware, 7; Elkhart, 5; Floyd, 2; Fulton, 3; Grant, 13; Hendricks, 55; How-

ard, 9; Jefferson, 13; Marion, 18; Miami, 49; Noble, 14; Pulaski, 5; Scott, 3; Shelby, 3; St. Joseph, 3; Tipton, 5; Vermillion, 1.

April—Ninety-one cases reported from 20 counties, with 1 death. The following counties reported the disease present: Cass, 2 cases; Clark, 1; Dearborn, 1; Dekalb, 9; Elkhart, 6; Floyd, 7; Grant, 9; Hendricks, 10; Howard, 4, with 1 death; Jackson, 15 cases; Jefferson, 4; Laporte, 1; Marion, 17; Marshall, 10; Miami, 10; Noble, 1; Shelby, 2; St. Joseph, 4; Wabash, 2; White, 1.

May—One hundred and forty-nine cases, with 1 death, reported from 23 counties. In the same month last year, 112 cases, no deaths, from 14 counties. The following counties reported smallpox: Allen, 3 cases; Cass, 2; Clinton, 1; Elkhart, 22; Floyd, 1; Fountain, 1; Grant, 5; Hamilton, 15; Harrison, 3; Hendricks, 8; Howard, 3; Laporte, 11; Lawrence, 1; Marion, 18; Marshall, 21; Miami, 6; Porter, 2; St. Joseph, 6 and 1 death; Tippecanoe, 6; Tipton, 14; Wabash, 8; White, 3; Whitley, 2.

June—One hundred and nineteen cases in 31 counties, with one death, from smallpox. In the corresponding month last year, 63 cases in 8 counties, with no deaths. The following counties reported the disease present: Allen, 2 cases; Boone, 2; Carroll, 9; Cass, 4; Clinton, 1; Delaware, 1; Elkhart, 13; Grant, 4; Hamilton, 10; Hendricks, 3; Howard, 1; Huntington, 2; Kosciusko, 1; Lake, 5; Laporte, 16; Lawrence, 7; Madison, 1; Marion, 7; Marshall, 30; Miami, 16; Montgomery, 7; Parke, 1; Pike, 3; St. Joseph, 18, and 1 death; Tippecanoe, 1 case; Tipton, 14; Vanderburgh, 1; Vermillion, 3; Wabash, 8; Wells, 1; Whitley, 1.

July—Seventy-four cases of smallpox in 21 counties, with no deaths. In the corresponding month last year there were 31 cases in 6 counties, with 3 deaths. The following counties reported the disease present: Allen, 1 case; Boone, 2; Cass, 3; Clinton, 2; Delaware, 2; Elkhart, 4; Grant, 4; Hamilton, 17; Hendricks, 2; Howard, 1; Jay, 3; Jefferson, 1; Kosciusko, 12; Laporte, 3; Marion, 3; Marshall, 2; Miami, 1; Montgomery, 1; Noble, 1; Tippecanoe, 3; Tipton, 6.

August—Sixty-three cases of smallpox in 18 counties, with no deaths. In the corresponding month last year, 40 cases in 3 counties, with no deaths. The following counties reported the disease present: Allen, 1 case; Boone, 3; Carroll, 10; Cass, 2; Dearborn, 2; Delaware, 1; Elkhart, 3; Grant, 3; Howard, 2; Knox, 1; Madison, 10; Marion, 3; Marshall, 6; Miami, 6; Montgomery, 1; Tippecanoe, 6; Tipton, 2; Wabash, 1.

September—Twenty-three cases of smallpox in 7 counties, with no deaths. The evidence makes it certain that probably twice or three times this number of cases existed, which should have been correctly diagnosed. Possibly a very large number of mild cases, unrecognizable by clinical diagnosis, occurred. The counties reporting smallpox were: Cass, 1; Clinton, 1; Dearborn, 3; Madison, 4; Marshall, 1; Montgomery, 1; Starke, 12; 23 cases in all.

October—Seventy-five cases of smallpox were reported from seven counties, with no deaths. In the corresponding month last year, 118 cases from 7 counties, with 3 deaths. The counties reporting the disease present were: Clinton, 4 cases; Elkhart, 5; Harrison, 2; Madison, 58; Marion, 2; Marshall, 1; Noble, 3.

November—One hundred and seven cases of smallpox were reported from 14 counties, with no deaths. In the corresponding month last year, 216 cases reported from 14 counties, with no deaths. The counties reporting the disease present were: Bartholomew, 1 case; Clay, 2; Daviess, 3; Elkhart, 15; Lagrange, 40; Madison, 21; Marshall, 1; Miami, 1; Noble, 2; Parke, 1; Sullivan, 1; Tippecanoe, 1; Wayne, 12.

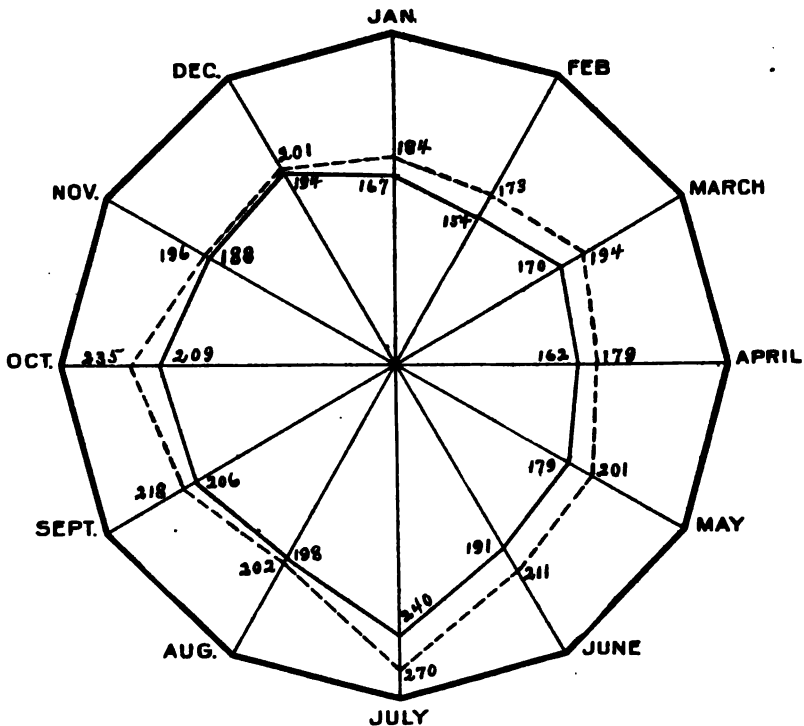
December—Two hundred and seven cases of smallpox in 18 counties, with no deaths. In the corresponding month last year, 393 cases in 19 counties, with 1 death. The disease was prevalent in the following counties: Allen, 2; Bartholomew, 1; Cass, 1; Clinton, 15; Elkhart, 45; Grant, 10; Johnson, 4; Lagrange, 60; Lawrence, 6; Madison, 38; Marion, 2; Marshall, 10; Miami, 5; Monroe, 2; Parke, 1; Rush, 1; St. Joseph, 12; Vigo, 1; Wayne, 2.

VIOLENCE.

The violence deaths numbered 2,464, as against 2,210 in 1906. The term violence includes accidents, suicides and homicides. The accidental deaths numbered 1,981, the suicides 361, and the homicides 122. No deaths by mob violence in 1907, and none since 1905.

The violence chart following compares the violence deaths with the average for the last eight years:

Comparison of 1907 with average of the last eight years.



— Average deaths per month for eight years, 1900-1907.

- - - Deaths per month for the year 1907.

Twelve months show more than average.

MONTHLY RECORD OF VIOLENCE DEATHS.

January—The deaths by violence numbered 140. In the corresponding month last year, 122. The cases were as follows: Murder, 2; suicide, 20; accidental, 118. Of the murders, 1 was by gunshot and 1 struck with an axe. Of the suicides, 4 chose shooting, 4 hanging, 1 cutting throat, 5 carbolic acid, 2 morphine, 3 arsenic, 1 asphyxiation with artificial gas. Of the accidental deaths, steam railroads killed 30; interurban cars, 3; fracture of skull and other bones, 14; mining accidents, 16; burns and scalds, 16; powder explosions, 9; falls, 5; gunshots, 4; electricity, 2; suffocation, 5; burning, 4; poison and other causes, the remainder.

February—The violent deaths numbered 131. In the same month last year, 109. The deaths were caused as follows: Murder, 6, 2 being females; suicides, 22, of which 9 were women and 13 men. The methods used were: Gunshots, 4 men; hanging, 4 men; cutting throat, 1 woman and 1 man; carbolic acid, 3 men and 2 women; morphine, 2 men; strychnine and other poisons, the remainder. The accidental deaths numbered 103. Killed by steam railroads, 15; by machinery, 2; burns and scalds, 15; crushing injuries, 33; horses and vehicles, 7; gunshots, 2; poisoning, 7; drowning, 4; suffocation and other methods, the remainder.

March—The deaths by violence numbered 166. In the same month last year, 112. Of the deaths by violence, 9 were murders, 36 suicides, and the remainder accidents. All the murders were by gunshots, 8 males and 1 female. Of the suicides, 6 were by gunshots, 3 drowning, 3 hanging, 15 carbolic acid, 6 by strychnine or morphine, and 3 by corrosive sublimate and other poisons. Of the accidental deaths, 24 were killed by steam railroads, 6 by street cars or interurbans, 25 by fractures or severe blows, 5 by machinery, 14 by burns and scalds, 3 by gunshots, 5 by drowning, 9 by falls, 3 by horses and vehicles, 11 by various poisonings, 5 by lightning and electricity, 6 by suffocation and strangulation, 2 by tetanus from wounds, 2 by blood-poisoning, and 2 by abortion.

April—Deaths by violence, 149. In the corresponding month last year, 124. Of the deaths by violence, 107 were males and 42 females. The murders numbered 6, 2 being by gunshots, 2 by sharp instruments, 1 by hanging and 1, an infant, by drowning. The suicides numbered 26, by gunshots 8, cutting throat 1, hanging 2, drowning 2, carbolic acid 6, morphine 5, strychnine 2. Accidental deaths, 117; by steam railroads, 19; street cars and interurbans, 6; automobiles, 1; horses and vehicles, 15; fractures and concussions, 20; machinery, 2; burns and scalds, 28; falls, 15; gunshots, 1; poi-

sons, 4; electricity, 2; lightning, 1; suffocation, 6; explosions, 3; and the remainder in various ways.

May—Deaths by violence, 180. Murders, 13; suicides, 36; accidental, 131. Of the murders, males 9, females 4, 8 were by gunshots, 4 cutting and stabbing, 1 drowned (a child). Of the suicides, males 27, females 9. Methods used: Gunshots, 6 males, 1 female; cutting arteries, males 2, females 2; wood alcohol, female 1; hanging, males 4, female 1. Of the accidental deaths: Steam railroads, males 36, female 1; trolley cars, males 3; fractures and crushing injuries, males 17, females 3; machinery, males 4; burns and scalds, males 2, females 11; drowning, males 8, female 1; gunshots, males 4; nitro-glycerine, males 6; falls, males 8, females 2; carbolic acid, males 2, females 2; ptomaine poisoning, male 1, females 2; tetanus (lockjaw, classed as accidental, because always depending upon accident), males 3, females 2; electricity, males 2; horses and vehicles, males 5, female 1; suffocation, male 1, females 3; other methods, 4.

June—Deaths by violence, 184. In the corresponding month last year, 164. Of the deaths by violence, 152 were males and 32 females. The murders numbered 7, suicides 39, accidental, 138. Of the murders, 5 were males and 2 females. Four were shot, one killed by knife wounds and one by carbolic acid. Of the 30 suicides, 16 chose gunshots, 6 hanging, 3 drowning, 6 carbolic acid, 2 knife wounds, 2 morphine, 3 poison, 1 fracture of skull by jumping from jail balcony. Of the 138 accidental deaths, 35 were on steam railroads, 2 by street cars, 2 by automobiles; crushing injuries, 25; gunshots, 3; drowning, 32; burns and scalds, 9; blood poisoning, 5; mining, 1; lightning, 6; electricity, 4; horses and vehicles, 5; poisoning, 7. It is to be noted that this month horses and vehicles killed 5, while automobiles only killed 2.

July—Deaths by violence, 225. In the corresponding month last year there were 177 deaths. In the preceding month there were 184 deaths. Of the deaths by violence, 180 were males and 45 were females. The murders numbered 12; suicides, 35; accidents, 178. Of the murders, 9 were males and 3 females. Ten were shot, 1 stabbed, and one killed with blunt instrument. Of the 35 suicides, 10 used firearms, 3 strychnia and arsenic, 3 hanging, 2 opium, and 1 liniment. Of the 178 accidents, 31 were railroad accidents, 11 interurbans and street cars, 1 by automobile, 2 fractured skull, 2 fractured femur, 1 fracture of other bones, 1 concussion, 2 crushing injuries, 16 burns and scalds, 46 drowning, 4 gunshots, 15 falling, 5 tetanus, 6 mine accidents, 3 ptomaine poison, 8 lightning, 7

poisons, 7 sunstroke and heat prostration, 1 cutting with knife, 1 struck by fork, 4 by horses and vehicles, 1 amputation of leg, 2 strangulation, and 1 unknown.

August—Deaths from violence, 186. In the corresponding month last year, 194. In the preceding month, 225. The murders numbered 11, 9 males and 2 females. Methods of murder: Gunshots, 6; cutting or stabbing, 1; blow by shovel handle, 1. Suicides numbered 17, 13 males and 4 females. Methods chosen were: Gunshots, 7; hanging, 1; burning, 2; carbolic acid, 3; arsenic, 4. Of the 158 accidental deaths, 47 were on steam railroads; street cars and interurbans, 6; fracture of skull and other bones, 14; burns and scalds, 16; gunshot, 1; drowning, 21; electricity, 5; lightning, 1; concussion of brain, 2; machinery, 2; falls, 21; suffocation and asphyxiation, 6; carbolic acid, 2; other poisons, 2; mining, 3; horses and vehicles, 4; gored by bull, 1; sunstroke, 3; not named, 2. Of the violent deaths, 151 were males and 35 females.

September—Deaths from violence, 199. In the corresponding month last year, 195. In the preceding month, 186. The murders numbered, 9; the suicides, 34; accidental, 146. Of the murders, all were males. Methods: Gunshots 8, blow on head 1. Of the 34 suicides, 8 were females and 26 males. Methods chosen were: Gunshots, 9 males; hanging, 7 males; knife wounds, 2 males; carbolic acid, 4 males, 1 female; strychnine, 1 male and 1 female; paris green, 1 male and 2 females. Of the 146 accidental deaths, 49 were by steam railroads, 5 by street cars and interurbans, 21 by fractures and crushing injuries, 14 by burns and scalds, 17 by drowning, 6 by gunshots, 15 by falls, 3 choked to death by food, 4 asphyxiated by gas, 2 by morphine, 11 by horses and vehicles, 2 by mining, 2 by lightning, 6 by various poisons, 2 by blood poisoning; not named, 5.

October—Deaths from violence, 219. In the corresponding month last year, 179. There were 13 murders, 29 suicides and 175 accidental deaths. Of the murdered persons, all were males. Ten were killed by gunshots, 1 by fracture of skull, 1 by stabbing, and 1 not named. Of the 29 suicides, 9 were women. The methods chosen were: Gunshots, 6 males, 2 females; hanging, 4 males, 3 females; paris green, 1 male and 1 female. Of the accidental deaths, steam railroads caused 38; street cars and interurbans, 10; burns and scalds, 14; gunpowder explosion, 28; drowning, 6; gunshots, 4; crushing injuries, 39; horses and vehicles, 11; asphyxiation and suffocation, 9; electricity, 3; drinking concentrated lye, 2; opium, 4; strychnia and chloral hydrate, 2; other poisons, 3; and the remainder by various methods.

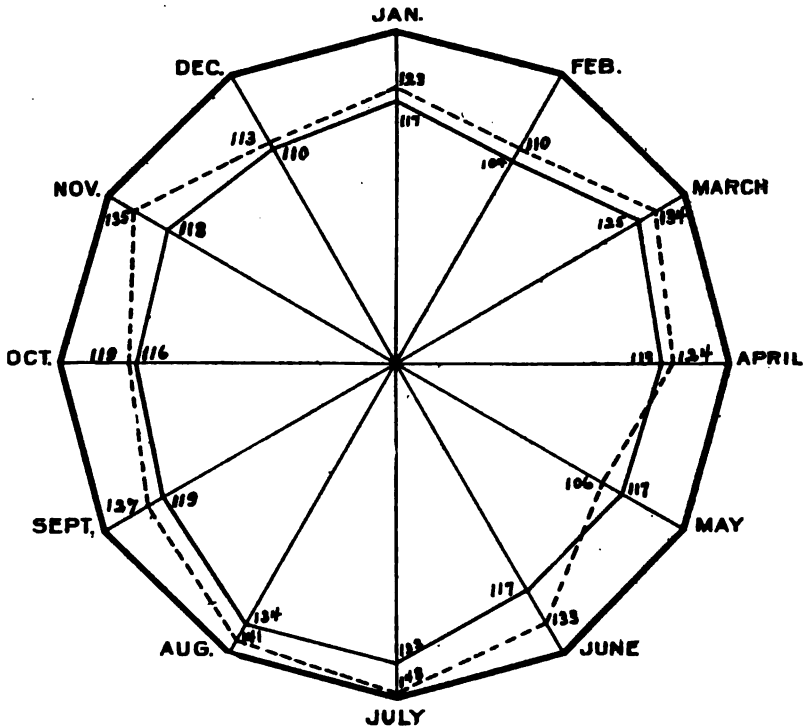
November—Deaths from violence, 176; corresponding month last year, 184. There were 13 murders, 26 suicides and 137 accidental deaths. Of the murders, 10 were males and 3 females. Seven males and 2 females were murdered by gunshots, 1 male by cutting of throat, and 3 males killed by blows from blunt instruments. Of the 26 suicides, 19 were males, 7 females. Eight males chose gunshots, 3 males and 2 females chose hanging, 1 male drowned himself, and 7 males and 5 females poisoned themselves. Of the accidental deaths, steam railroads killed 30; street cars and interurbans, 4; fractures and crushing injuries, 12; burns and scalds, 26; gunshots, 6; drowning, 2; horses and vehicles, 9; falls, 17; electricity, 3; poisons, 7, and other methods, the remainder.

December—Deaths from violence numbered 184. In the corresponding month last year, 185. The causes were: Murder, 12; suicides, 33; accidental, 139. Of the 12 murders, 7, all males, were by gunshots; by stabbing, 1 male and 1 female; by blunt instruments, 1 male; by suffocation and strangulation, 1 female and 1 male. Of the suicides, 13 were by gunshots, 12 males and 1 female; 7 were by hanging, 6 males and 1 female; 2 were by cutting throat, both males; 9 were by carbolic acid, 3 males and 6 females; other poisons, 2 males. Of the accidental deaths, steam railroads caused 36; street cars and interurbans, 7; fractures, falls and crushing injuries, 33; burns and scalds, 20; gunshots, 5; drowning, 3; machinery, 5; mine accidents, 2; electricity, 2; injury at birth, 5; ptomaine poisoning, 2; asphyxiation and suffocation, 7; poisons, 6; alcoholism, 3; exposure to cold, 2; wound infection, 1.

CANCER.

Cancer is an increasing cause of death in Indiana. The chart following shows this to be true. The number of cancer deaths in 1907 was 1,513, the rate being 55.7 per 100,000.

Comparison of 1907 with average of the last eight years.



— Average deaths per month for eight years, 1900-1907.

---- Deaths per month for the year 1907.

Eleven months show more than average.

One month shows less than average.

MONTHLY ANALYSIS OF DISEASE PREVALENCE.

January—Bronchitis was reported as the most prevalent disease, and tonsillitis, which was reported as most prevalent in November and December, fell to third place. Pneumonia was fourth in area of prevalence. The order of prevalence was as follows: Bronchitis, influenza, tonsillitis, pneumonia, rheumatism, scarlet fever, diphtheria and membranous croup, typhoid fever (enteric), measles, pleuritis, erysipelas, diarrhoea, smallpox, intermittent and remittent fever, typho-malaria fever, whooping cough, inflammation of bowels, cerebrospinal meningitis, puerperal fever, cholera morbus, dysentery, cholera infantum.

February—Influenza was reported as the most prevalent malady. Pneumonia, which was fourth in the preceding month, rises to third place this month. The order of prevalence is as follows: Influenza, bronchitis, pneumonia, tonsillitis, rheumatism, measles, scarlet fever, typhoid fever, pleuritis, diphtheria and croup, diarrhoea, smallpox, whooping cough, intermittent fever, erysipelas, inflammation of bowels, typho-malaria fever, cerebrospinal meningitis, dysentery, puerperal fever, cholera morbus, cholera infantum.

March—Influenza was reported as the most prevalent malady, and this was true also of the preceding month. In the corresponding month last year, tonsillitis was the most prevalent. Pneumonia was the third most prevalent disease in February, and it fell to fifth place this month. The order of prevalence as reported was as follows: Influenza, tonsillitis, rheumatism, measles, pneumonia, bronchitis, diphtheria and croup, scarlet fever, pleuritis, intermittent and remittent fever, typhoid fever, diarrhoea, smallpox, whooping cough, inflammation of bowels, erysipelas, dysentery, typho-malaria fever, cerebrospinal meningitis, puerperal fever, cholera morbus, cholera infantum.

April—Tonsillitis was reported as the most prevalent disease. In the preceding month, influenza occupied this position. In the corresponding month last year, rheumatism was reported to be the most prevalent. Measles, which existed in every county in the state, causing forty-two deaths, and in some instances appearing in extra epidemic form, was, nevertheless, the fifth most prevalent malady. The order of prevalence as reported was as follows: Tonsillitis, bronchitis, rheumatism, influenza, measles, pneumonia, typhoid fever (enteric), pleuritis, intermittent fever, scarlet fever, diarrhoea, diphtheria and membranous croup; whooping cough, smallpox, inflammation of bowels, erysipelas, typho-malaria fever,

puerperal fever, dysentery, cholera morbus, cerebrospinal meningitis, cholera infantum.

May—Measles was reported the most prevalent disease. It appeared in every county; in many places it was epidemic and closed the schools. Nevertheless, it was not as bad as in the preceding month, when there were 42 measles deaths, against 19 this month. In May last year rheumatism was the most prevalent disease. The order of prevalence this month was: Measles, rheumatism, bronchitis, tonsillitis, influenza, pneumonia, typhoid fever, scarlet fever, diarrhoea, intermittent fever, diphtheria, smallpox, pleuritis, whooping cough, erysipelas, inflammation of bowels, cholera morbus, puerperal fever, typho-malaria fever, dysentery, cerebrospinal meningitis, cholera infantum.

June—Measles was reported as the most prevalent disease. In the preceding month measles also occupied this position. In the corresponding month last year rheumatism was the most prevalent malady. Although measles was the most prevalent disease, and although it stood fifth in prevalence in April, still the deaths were fewer, being 16 for June and 42 for April. The order of disease prevalence as reported is as follows: Measles, rheumatism, tonsillitis, diarrhoea, bronchitis, typhoid fever, cholera morbus, intermittent and remittent fever, smallpox, diphtheria, membranous croup, pneumonia, scarlet fever, inflammation of bowels, cholera infantum, dysentery, erysipelas, influenza, pleuritis, whooping cough, puerperal fever, typho-malaria fever, cerebrospinal meningitis.

July—Diarrhoea was reported the most prevalent disease. In the preceding month measles was first on the list. In the corresponding month last year diarrhoea was the most prevalent disease. Diarrhoeal diseases caused 415 deaths during the month, and for the corresponding month last year, 361 deaths. The order of disease prevalence is as follows: Diarrhoea, typhoid fever, cholera infantum, cholera morbus, measles, dysentery, rheumatism, tonsillitis, intermittent and remittent fever, bronchitis, inflammation of bowels, smallpox, diphtheria and membranous croup, scarlet fever, whooping cough, typho-malaria fever, pneumonia, erysipelas, pleuritis, puerperal fever, influenza, cerebrospinal meningitis.

August—Typhoid fever was reported to be the most prevalent disease. In the preceding month diarrhoeal diseases were reported first. In the corresponding month last year diarrhoeal diseases were first. The order of disease prevalence as reported is as follows: Typhoid fever, diarrhoea, rheumatism, cholera morbus, tonsillitis, cholera infantum, dysentery, bronchitis, intermittent fever, inflammation of bowels, measles, diphtheria and croup.

typho-malaria fever, scarlet fever, influenza, smallpox, pneumonia, pleuritis, whooping cough, erysipelas, puerperal fever, cerebrospinal meningitis.

September—As in the preceding month, typhoid fever was reported to be the most prevalent disease. In the corresponding month last year rheumatism was reported as most prevalent. The order of prevalence was as follows: Typhoid fever, tonsillitis, rheumatism, bronchitis, diarrhoea, intermittent fever, dysentery, diphtheria and croup, cholera infantum, cholera morbus, pneumonia, scarlet fever, influenza, inflammation of bowels, typho-malaria fever, erysipelas, measles, pleuritis, whooping cough, smallpox, puerperal fever, cerebrospinal meningitis, chickenpox.

October—Typhoid fever was reported to be the most prevalent disease. This was also true for the preceding month. Tonsillitis was the most prevalent in October of the preceding year. The order of prevalence was as follows: Typhoid fever, bronchitis, tonsillitis, rheumatism, diphtheria and croup, pneumonia, influenza, diarrhoea, intermittent fever, scarlet fever, pleuritis, inflammation of bowels, measles, dysentery, erysipelas, cholera infantum, typho-malaria fever, whooping cough, chickenpox, cholera morbus, smallpox, puerperal fever, cerebrospinal meningitis.

November—Bronchitis and tonsillitis were reported to be the most prevalent diseases. Typhoid fever was reported most prevalent in October, and falls to third place in November. Tonsillitis and bronchitis were also reported as the most prevalent maladies in November of last year. The order of disease prevalence was as follows: Bronchitis, tonsillitis, typhoid fever, rheumatism, influenza, pneumonia, diphtheria and croup, diarrhoea, pleuritis, scarlet fever, intermittent fever, measles, chickenpox, erysipelas, smallpox, dysentery, inflammation of bowels, whooping cough, puerperal fever, typho-malaria fever, cholera morbus, cerebrospinal meningitis, cholera infantum.

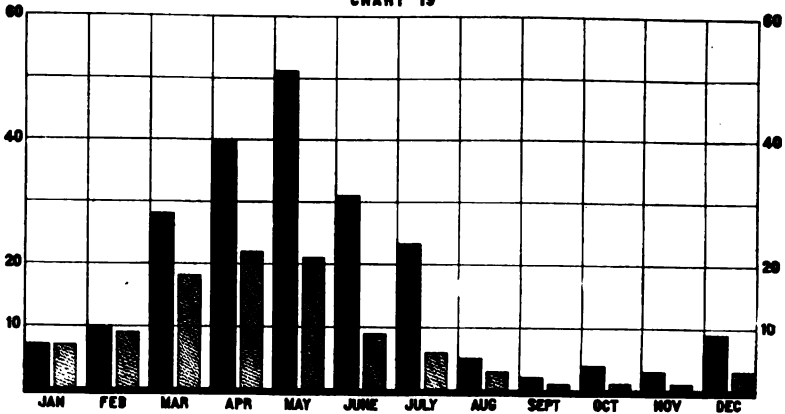
December—Bronchitis, tonsillitis and influenza were reported to be the most prevalent diseases. This was also true for the corresponding month last year and for the preceding month. Typhoid fever had stood third in November and fell to seventh place in December. The order of disease prevalence was as follows: Bronchitis, tonsillitis, influenza, rheumatism, pneumonia, typhoid fever (enteric), diphtheria and membranous croup, scarlet fever, pleuritis, diarrhoea, measles, chickenpox, smallpox, intermittent and remittent fever, erysipelas, inflammation of the bowels, whooping cough, puerperal fever, cholera morbus, dysentery, typho-malaria fever, cholera infantum, cerebrospinal meningitis.

MEASLES DEATHS BY MONTHS

■ - 1967

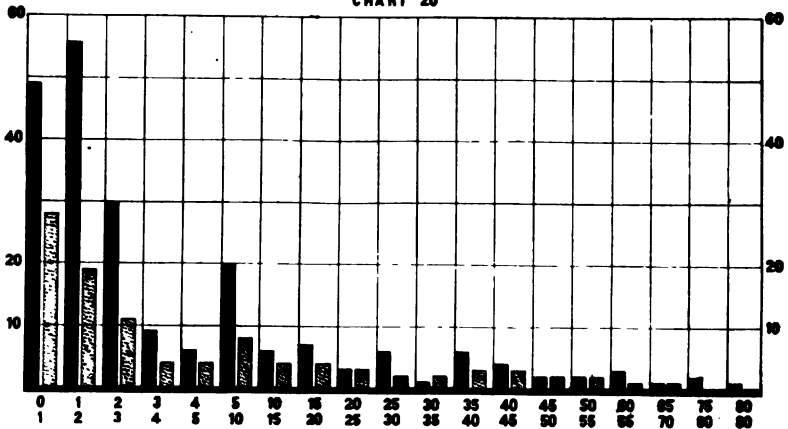
■ - AVERAGE FOR LAST EIGHT YEARS

CHART 19



BY AGES

CHART 20



TABLES

OF

ANNUAL STATISTICAL REPORT

FOR THE YEAR 1907.

TABLE 1.

*Deaths in Indiana During the Year Ending December 31, 1907,
Statistically Classified by the International System, with Rates
Per 100,000 Population, Based Upon School Census of 1907
multiplied by $3\frac{1}{2}$ —2,714,744.*

Classification Number.	CAUSES OF DEATH.	Number of Deaths.	Death Rate Per 100,000.
I. GENERAL DISEASES—EPIDEMICS.			
1	Typhoid fever.....	933	34.3
2	Exanthematous typhus.....		
3	Recurrent fever.....	81	2.9
4	Intermittent and malarial fever.....	8	.2
5	Varicella or smallpox.....		
6	Measles.....	213	7.8
7	Scarlatina.....	91	3.3
8	Whooping cough.....	136	5.0
9	Croup.....	17	.6
9a	Diphtheria.....	336	12.3
10	Influenza.....	666	24.5
11	Miliary fever.....		
12	Asiatic cholera.....		
13	Cholera nostras.....	19	.7
14	Dysentery.....	242	8.9
15	Bubonic plague.....		
16	Yellow fever.....		
17	Leprosy.....		
18	Erysipelas.....	77	2.8
19	Other epidemic diseases.....	6	.2
20	Purulent septi-cemia and infection.....	166	6.1
21	Glanders and farcy.....		
22	Malignant pustule and anthrax.....	2	.07
23	Rabies.....	3	.1
24	Actinomycosis, trichinosis, etc.....	1	.03
25	Pellagra.....		
26	Tuberculosis of the larynx.....	51	1.8
27	Tuberculosis of the lungs.....	3,837	141.3
28	Tuberculosis of the meninges.....	220	8.1
29	Abdominal tuberculosis.....	241	8.8
30	Pott's disease.....	17	.6
31	Cold abscess.....		
32	White swelling.....	20	.7
33	Tuberculosis of other organs.....	63	2.3
34	General tuberculosis.....	73	2.6

TABLE 1—Continued.

Classification Number.	CAUSES OF DEATH.	Number of Deaths.	Death Rate Per 100,000.
35	Scrofula.....	9	.3
36	Syphilis.....	69	2.5
36a	Soft chancre.....		
37	Gonorrhea (5 years and over).....	1	.03
38	Gonorrhea (under 5 years).....		
39	Cancer and other malignant tumors of the buccal cavity.....	62	2.2
40	Cancer and other malignant tumors of the stomach and liver.....	591	21.7
41	Cancer and other malignant tumors of the peritoneum, intestines and rectum.....	151	5.5
42	Cancer and other malignant tumors of the female genital organs.....	206	7.5
43	Cancer and other malignant tumors of the breast.....	130	4.7
44	Cancer and other malignant tumors of the skin.....	89	3.2
45	Cancer and other malignant tumors of other organs.....	284	10.4
46	Other tumors.....	36	1.3
47	Acute articular rheumatism.....	115	4.2
48	Chronic rheumatism and gout.....	70	2.5
49	Scurvy.....	4	.1
50	Diabetes.....	252	9.2
51	Exophthalmic goitre.....	24	.8
52	Addison's disease.....	5	.1
53	Leukemia.....	22	.8
54	Anemia chlorosis.....	102	3.7
55	Other general diseases.....	26	.9
56	Alcoholism, acute and chronic.....	124	4.5
57	Chronic lead poisoning.....	1	.03
58	Other chronic poisonings (occupational).....		
59	Other chronic poisonings.....	16	.5
II. LOCAL DISEASES—DISEASES OF THE NERVOUS SYSTEM AND ORGANS OF SPECIAL SENSE.			
60	Encephalitis.....	56	2.0
61	Simple meningitis.....	384	14.1
61a	Epidemic cerebro-spinal meningitis.....	180	6.6
62	Progressive locomotor ataxia.....	45	1.6
63	Other diseases of the spinal cord.....	127	4.6
64	Congestion and hemorrhage of the brain.....	1,599	58.9
65	Softening of the brain.....	112	4.1
66	Paralysis, cause unspecified.....	691	25.4
67	General paralysis.....	116	4.2
68	Other forms of insanity.....	75	2.7
69	Epilepsy.....	142	5.2
70	Convulsions (non-puerperal; 5 years and over).....	10	.3
71	Convulsions (under 5 years).....	221	8.1
72	Tetanus.....	59	2.1
73	Chorea.....	7	.2
74a	Other diseases of the brain.....	73	2.6
74b	Other diseases of the nervous system.....	58	2.1
75	Diseases of the eye and its adnexa.....	1	.03
76	Diseases of the ear.....	18	.6
III. DISEASES OF THE CIRCULATORY SYSTEM.			
77	Pericarditis.....	48	1.7
78	Acute endocarditis.....	162	5.9
79	Organic diseases of the heart.....	2,766	101.8
80	Angina pectoris.....	232	9.2
81	Diseases of the arteries, atheroma, aneurism, etc.....	264	9.7
82	Embolism and thrombosis.....	57	2.0
83	Diseases of the veins (varices, hemorrhoids, phlebitis, etc.).....	10	.3
84	Diseases of the lymphatic system (lymphangitis, etc.).....	4	.1
85	Hemorrhages.....	30	1.4
86	Other diseases of the circulatory system.....	1	

TABLE 1—Continued.

Classification Number.	CAUSES OF DEATH.	Number of Deaths.	Death Rate Per 100,000.
IV. DISEASES OF THE RESPIRATORY SYSTEM.			
87	Diseases of the nasal fossae.....	1	.03
88	Diseases of the larynx.....	36	1.3
89	Diseases of the thyroid body.....	4	.1
90	Acute bronchitis.....	246	9.0
91	Chronic bronchitis.....	185	6.8
92	Broncho-pneumonia.....	585	21.5
93	Pneumonia.....	2,353	86.6
94	Pleurisy.....	56	2.0
95	Congestion and apoplexy of the lungs.....	204	9.7
96	Gangrene of the lungs.....	5	.1
97	Asthma.....	93	3.4
98	Pulmonary emphysema.....	10	.3
99	Other diseases of the respiratory system (phthisis excepted).....	93	3.4
V. DISEASES OF THE DIGESTIVE SYSTEM.			
100	Diseases of the mouth and adnexa.....	20	.7
101	Diseases of the pharynx.....	41	1.5
102	Diseases of the esophagus.....	11	.4
103	Ulcer of the stomach.....	75	2.7
104	Other diseases of the stomach (cancer excepted).....	542	19.9
105	Diarrhoea and enteritis (under 2 years).....	1,020	59.6
105a	Chronic diarrhoea (under 2 years).....	19	.6
106	Diarrhoea and enteritis (2 years and over).....	586	21.5
107	Intestinal parasites.....	1	.03
108	Hernia and intestinal obstruction.....	292	10.8
109	Other diseases of the intestines.....	116	4.2
110	Acute yellow atrophy of the liver.....	13	.4
111	Hydatid tumors of the liver.....		
112	Cirrhosis of the liver.....	236	8.6
113	Biliary calculi.....	76	2.7
114	Other diseases of the liver.....	236	8.6
115	Diseases of the spleen.....	3	.1
116	Simple peritonitis (non-puerperal).....	222	8.1
117	Other diseases of the digestive system (cancer and tuberculosis excepted).....	7	.2
118	Appendicitis and abscess of the iliac fossae.....	205	7.5
VI. DISEASES OF THE GENITO-URINARY SYSTEM.			
119	Acute nephritis.....	169	6.2
120	Bright's disease.....	1,644	60.5
121	Other diseases of the kidneys and their adnexa.....	49	1.8
122	Calculi of the urinary tract.....	7	.2
123	Diseases of the bladder.....	123	4.5
124	Diseases of the urethra, urinary abscess, etc.....	11	.4
125	Diseases of the prostate.....	75	2.7
126	Nonvenereal diseases of the male genital organs.....	1	.03
127	Metritis.....	4	.1
128	Uterine hemorrhage (nonpuerperal).....	7	.2
129	Uterine tumor (noncancerous).....	81	1.1
130	Other diseases of the uterus.....	35	1.2
131	Cysts and other tumors of the ovary.....	25	.9
132	Other diseases of the female genital organs.....	20	.7
133	Nonpuerperal diseases of the breast (cancer excepted).....	1	.03
VII. PUERPERAL DISEASES			
134	Accidents of pregnancy.....	41	1.5
135	Puerperal hemorrhage.....	26	.9
136	Other accidents of labor.....	12	.4
137	Puerperal septicemia.....	196	7.2

TABLE 1—Continued.

Classification Number.	CAUSES OF DEATH.	Number of Deaths.	Death Rate Per 100,000.
138	Puerperal albuminuria and convulsions.....	55	2.0
139	Phlegmasia alba dolens (puerperal).....	14	.5
140	Other puerperal accidents—sudden death.....	1	.03
141	Puerperal diseases of the breast.....		
VIII. DISEASES OF THE SKIN AND CELLULAR TISSUES.			
142	Gangrene.....	115	4.2
143	Carbuncle.....	14	.5
144	Acute abscess, phlegmon.....	14	.5
145	Other diseases of the skin and its adnexa.....	21	.7
IX. DISEASES OF THE LOCOMOTOR SYSTEM.			
146	Nontuberculous diseases of the bones.....	33	1.2
147	Arthritis and other diseases of the joints (tuberculosis and rheumatism excepted).....	2	.07
148	Amputation.....	1	.03
149	Other diseases of the organs of locomotion.....	1	.03
X. MALFORMATIONS.			
150	Malformations.....	266	9.7
XI. DISEASES OF INFANCY.			
151	Congenital debility, icterus, sclerema.....	1,060	61.1
152	Other diseases peculiar to early infancy.....	71	2.6
153	Lack of care.....	52	1.9
XII. DISEASES OF OLD AGE.			
154	Senile debility.....	1,090	40.1
XIII. EXTERNAL CAUSES.			
A.—Suicides.			
155	Suicide by poison.....	163	6.
156	Asphyxia.....	6	.2
157	Hanging or strangulation.....	50	1.8
158	Drowning.....	19	.7
159	Firearms.....	105	3.8
160	Cutting instruments.....	11	.4
161	Jumping from high places.....	4	.1
162	Crushing.....	1	.03
163	Other suicides.....	2	.07
B.—Accidents.			
164	Fractures.....	113	4.1
165	Dislocations.....	7	.2
166a	Accidental gun shot wounds.....	46	1.6
166b	Injuries by machinery.....	49	1.8
166c	Injuries in mines and quarries.....	53	1.9
166d	Railroad accidents and injuries.....	508	18.7
166e	Injuries by horses and vehicles.....	80	2.9
166f	Other accidental traumatism.....	366	13.4
167	Burns and scalds.....	207	7.6
168	Burns from corrosive substances.....		
169	Sunstroke.....	26	.9
170	Freezing.....	7	.2
171	Electric shock.....	45	1.6
172	Accidental drowning.....	153	5.6
173	Inanition (starvation).....	39	1.4
174	Absorption of deleterious gases (nonsuicidal).....	21	.7
175	Other acute poisonings.....	104	3.8
176	Other external violence.....	157	5.7

TABLE 1—Continued.

Classification Number.	CAUSES OF DEATH.	Number of Deaths.	Death Rate Per 100,000.
	<i>C.—Homicides.</i>		
176a	Homicide.....	122	4.4
176b	Mob violence.....		
	<i>XIV. CAUSES ILL-DEFINED.</i>		
177	Droway.....	73	2.6
178	Sudden death.....	3	.1
179	Unspecified or ill-defined causes of death.....	278	10.2
	<i>XV. STILLBIRTHS.</i>		
180	Stillbirths.....	2,019	74.3
	All causes.....	26,461	1,343.0

TABLE No. 2.

Deaths from all Causes, by Months, Ages, Color, Nationality and Condition, for the Year Ending December 31, 1907, International Classification.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
I. GENERAL DISEASES. EPIDEMIC.												
1. Typhoid fever.....	72	57	48	38	42	30	58	145	141	143	84	75
2. Exanthematic typhus.....												
3. Recurrent fever.....	4	1	3	5	3	4	9	9	18	14	7	4
4. Intermittent and malarial fever.....	3	2		1	1	1						
5. Variola or smallpox.....												
6. Measles.....	7	10	28	40	51	31	23	5	2	4	3	9
7. Scarletina.....	6	9	18	9	5	3	10	5	3	7	8	8
8. Whooping cough.....	7	6	11	15	24	11	23	18	7	3	3	8
9. Croup.....	4	2	1		2				2	1	3	2
9a. Diphtheria.....	39	39	34	27	18	10	15	20	33	35	34	32
10. Influenza.....												
11. Miliary fever.....	71	159	234	51	52	14	7	4	4	2	17	51
12. Asiatic cholera.....												
13. Cholera nostras.....												
14. Dysentery.....	7	2	5	5	3	1	6	7	3	1	1	
15. Bubonic plague.....							56	71	44	18	8	5
16. Yellow fever.....												
17. Leprosy.....												
18. Erysipelas.....	15	5	19	9	9	4		4	1	4	4	3
19. Other epidemic diseases.....	2			2			1				1	
20. Purulent septicaemia and infection.....												
21. Glanders and farcy.....	15	14	20	17	15	15	11	16	15	12	7	9
22. Malignant pustule and anthrax.....												
23. Rabies.....			1				1	1				
24. Actinomycosis trichinosis, etc.....	1											1

25. Pellegri.	6	3	9	6	1	2	7	6	3
26. Tuberculosis of the larynx.	394	389	387	386	313	310	269	271	279
27. Tuberculosis of the lungs.	18	12	20	26	27	17	17	9	13
28. Tuberculosis of the meninges.	13	11	19	22	21	31	22	18	21
29. Abdominal tuberculosis.									
30. Pott's disease.			1	5		2	1	3	2
31. Cold abscess.									
32. White swelling.	1	2	1	1	3	2	3	2	
33. Tuberculosis of other organs.	10	6	8	5	7	7	4	4	7
34. General tuberculosis.	1	6	4	3	5	18	2	4	7
35. Scrofula.									
36. Syphilis.	1	1	1		2			1	
37. Soft chancre.	1	4	5	7	1	11	4	5	9
38. Gonorrhea (5 years and over).									
39. Gonorrhea (under 5 years).							1		
40. Cancer and other malignant tumors of the buccal cavity.	4	5	9	4	5	10	4	4	6
41. Cancer and other malignant tumors of the stomach and liver.	53	36	41	51	54	52	59	55	44
42. Cancer and other malignant tumors of the peritoneum, intestines and rectum.	9	15	16	12	16	8	13	14	8
43. Cancer and other malignant tumors of the female genital organs.	19	13	23	16	18	19	9	20	13
44. Cancer and other malignant tumors of the breast.	16	8	12	9	6	19	10	15	9
45. Cancer and other malignant tumors of the skin.	3	4	9	7	12	7	6	12	6
46. Cancer and other malignant tumors of other organs.	19	27	24	23	37	26	20	17	27
47. Other tumors.	2	8	1	3	3	7	3	8	2
48. Acute articular rheumatism.	8	8	10	15	3	4	5	12	11
49. Chronic rheumatism and gout.	5	7	12	10	5	1	4	3	4
50. Scurvy.		1							
51. Diabetes.	21	20	23	19	17	11	26	31	23
52. Epithelioma of the prostate.	2	2	2	4	1	1	1	3	3
53. Addison's disease.			2		1	2	2		
54. Leukemia.	1		2	1	5	2	5	1	1
55. Anemia, chlorosis.									
56. Other general diseases.	9	7	9	11	5	15	10	6	6
57. Alcoholism, acute and chronic.	2		2		3	1	3	7	4
58. Chronic lead poisoning.	8	11	6	8	13	16	9	16	11
59. Other chronic poisonings (occupational).									
60. Other chronic poisonings.	1	2	2			3	1		2
II. LOCAL DISEASES—DISEASES OF THE NERVOUS SYSTEM AND ORGANS OF SPECIAL SENSE.									
61. Encephalitis.									
62. Simple meningitis.	10	5	4	4	4	7	2	3	3
63. Epidemic cerebro-spinal meningitis.	31	27	50	47	36	28	22	19	26
64. Progressive locomotor ataxia.	24	19	21	14	13	14	11	12	18
65. Other diseases of the spinal cord.	3	4	3	3	3	6	7	1	3
66. Other diseases of the spinal cord.	14	12	9	9	9	18	10	4	11

TABLE No. 2—Continued.

	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
64. Congestion and hemorrhage of the brain.....	142	129	144	142	122	122	118	134	126	131	129	150
65. Softening of the brain.....	6	19	14	9	10	6	2	6	10	11	6	11
66. Paralysis, cause unspecified.....	60	65	62	69	56	64	64	55	45	53	41	57
67. General paralysis.....	5	11	4	4	10	6	13	13	17	13	7	8
68. Other forms of insanity.....	1	7	7	8	2	4	9	8	5	6	10	8
69. Epilepsy.....	7	14	5	16	13	19	8	16	11	10	12	11
70. Convulsions (non-puerperal; 5 years and over).....			2	3				1	1			2
71. Convulsions (under 5 years).....	37	21	27	18	15	13	21	11	17	14	13	14
72. Tetanus.....	3	3	4	2	7	3	12	12	8	4	3	1
73. Chorea.....	1		1		1		1		2			1
74a. Other diseases of the brain.....	6	7	6	6	9	7	2	4	6	7	6	7
74b. Other diseases of the nervous system.....	11	6	1	6	4	3	4	3	4	7	3	6
75. Diseases of the eye and its adnexa.....												
76. Diseases of the ear.....	2	1	1		2	4		1	1	1	2	3
III. DISEASES OF THE CIRCULATORY SYSTEM.												
77. Pericarditis.....		2	7	4	4	4	5	3	9	2	4	4
78. Acute endocarditis.....	13	11	16	17	13	17	18	18	9	21	13	6
79. Organic diseases of the heart.....	204	204	230	220	251	218	246	196	223	251	242	273
80. Angina pectoris.....	21	26	20	26	33	20	15	29	18	21	11	22
81. Diseases of the arteries, atheroma, aneurism, etc.....	26	23	24	24	21	30	12	29	14	20	20	21
82. Embolism and thrombosis.....	5	5	4	6	1	9	1	1	7	7	2	6
83. Diseases of the veins (varices, hemorrhoids, phlebitis, etc.).....	1	1	2	1	1	2	1	1			2	
84. Diseases of the lymphatic system (lymphangitis, etc.).....	1		3	1	4	3	2	4			4	4
85. Hemorrhages.....	9	5	3	1							1	
86. Other diseases of the circulatory system.....												
IV. DISEASES OF THE RESPIRATORY SYSTEM.												
87. Diseases of the nasal fossae.....												
88. Diseases of the larynx.....	4	4	3	4	3	2	1	2	2	4	4	3
89. Diseases of the thyroid body.....	1											
90. Acute bronchitis.....	38	30	27	21	19	16	9	8	14	17	10	19
91. Chronic bronchitis.....	19	28	18	14	20	14	13	7	9	8	17	18

92.	Broncho-pneumonia.....	76	106	78	56	52	33	10	11	14	42	49	58
93.	Pneumonia.....	343	501	420	400	193	89	41	43	52	92	196	235
94.	Pleurisy.....	5	8	5	5	3	9	6	2	4	2	1	3
95.	Congestion and apoplexy of the lungs.....	26	39	34	34	31	22	11	14	9	11	13	20
96.	Gangrene of the lungs.....		1			1	1			1			
97.	Asthma.....	10	13	5	4	8	5	4	6	9	11	8	10
98.	Pulmonary emphysema.....	2	3	1	2		1				1		
99.	Other diseases of the respiratory system (phthisis excepted).....	10	8	10	7	6	8	5	13	7	1	7	11
V. DISEASES OF THE DIGESTIVE SYSTEM.													
100.	Diseases of the mouth and adnexa.....	4		4	1	2		4	1	2	1	1	
101.	Diseases of the pharynx.....	4	2	5	2	5		4	4	1	2	1	6
102.	Diseases of the esophagus.....		1	1	1	2			1	1	1	2	
103.	Ulcer of the stomach.....	1	4	5	10	3	5	8	5	6	11	9	8
104.	Other diseases of the stomach (cancer excepted).....	35	38	64	55	40	30	52	58	39	43	30	49
105.	Diarrhoea and enteritis (under 2 years).....	22	32	35	18	35	80	395	502	275	153	38	25
105a.	Chronic diarrhoea (under 2 years).....	2	2				1	1			7	2	
106.	Diarrhoea and enteritis (2 years and over).....	33	31	36	33	26	44	88	123	75	43	33	19
107.	Intestinal parasites.....												
108.	Hernia and intestinal obstruction.....	28	18	22	23	21	18	27	27	35	25	28	20
109.	Other diseases of the intestines.....	11	7	9	8	8	7	20	10	14	8	7	7
110.	Acute yellow atrophy of the liver.....					1		3	4		1	1	3
111.	Hydatid tumors of the liver.....												
112.	Cirrhosis of the liver.....	21	16	20	20	12	22	23	18	15	26	19	24
113.	Biliary calculi.....	2	4	6	3	8	5	6	10	8	6	12	6
114.	Other diseases of the liver.....	23	21	22	24	18	20	14	15	24	18	19	18
115.	Diseases of the spleen.....							2		1			
116.	Simple peritonitis (non-puerperal).....	23	14	29	21	19	27	11	23	17	13	14	12
117.	Other diseases of the digestive system (cancer and tuberculous excepted).....							1					
118.	Appendicitis and abscess of the iliac fossa.....	15	19	17	17	17	14	32	16	12	10	17	19
VI. DISEASES OF THE GASTRO-URINARY SYSTEM.													
119.	Acute nephritis.....	19	20	11	12	15	10	14	8	12	10	20	18
120.	Bright's disease.....	155	144	167	136	141	124	119	121	128	118	148	133
121.	Other diseases of the kidneys and their adnexa.....	4	5	6	1	1	2	7	7	4	3	4	5
122.	Calculi of the urinary tract.....			2			1		1		1		1
123.	Diseases of the bladder.....	9	13	9	10	12	13	13	10	11	8	6	9
124.	Diseases of the urethra, urinary abscess, etc.....												
125.	Diseases of the prostate.....	1	1	6	2	8	1	5	10	6	3	1	1
126.	Non-venereal diseases of the male genital organs.....	5	5		7		5				5	5	8
127.	Metritis.....												
128.	Uterine hemorrhage (non-puerperal).....	2			1	1			1	1	1	1	1

TABLE No. 2—Continued.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
129. Uterine tumor (non-cancerous).....	2	.....	3	.....	2	3	6	3	3	5	1	3
130. Other diseases of the uterus.....	3	.....	8	.....	3	1	4	4	2	2	1	5
131. Cysts and other tumors of the ovary.....	2	3	2	3	.....	1	1	.....	3	3	4	2
132. Other diseases of the female genital organs.....	.....	2	3	1	5	3	1	2	1	.....	1	1
133. Non-puerperal diseases of the breast (cancer excepted).....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....
VII. PUERPERAL DISEASES.												
134. Accidents of pregnancy.....	.....	1	7	3	2	3	4	7	2	3	3	7
135. Puerperal hemorrhage.....	3	2	.....	1	3	2	2	4	3	3	2	1
136. Other accidents of labor.....	.....	.....	1	.....	.....	1	1	2	.....	.....	1	2
137. Puerperal septemia.....	21	25	31	26	20	12	12	7	8	12	12	10
138. Puerperal albuminuria and convulsions.....	4	5	2	5	6	8	8	4	3	3	5	2
139. Plegmatia alba dolens (puerperal).....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
140. Other puerperal accidents—sudden death.....	.....	1	.....	1	3	1	2	1	2	2	.....	1
141. Puerperal diseases of the breast.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
VIII. DISEASES OF THE SKIN AND CELLULAR TISSUES.												
142. Gangrene.....	13	14	9	6	10	8	14	11	7	8	4	11
143. Carbuncle.....	2	.....	2	1	2	2	2	.....	1	1	2	1
144. Acute abscess, phlegmon.....	.....	1	2	2	.....	.....	2	2	2	2	1	1
145. Other diseases of the skin and its adnexa.....	1	4	2	.....	2	2	.....	3	1	1	2	3
IX. DISEASES OF THE LOCOMOTOR SYSTEM.												
146. Non-tuberculous diseases of the bones.....	2	1	3	1	2	1	3	2	7	3	2	6
147. Arthritis and other diseases of the joints (tuberculosis and rheumatism excepted).....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
148. Amputation.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
149. Other diseases of the organs of locomotion.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
X. MALFORMATIONS.												
150. Malformations.....	20	15	17	24	22	28	21	20	26	30	13	29

XI. DISEASES OF INFANCY.

151. Congenital debility, icterus, sclerema.....	150	161	188	133	148	124	126	153	130	118	127	153
152. Other diseases peculiar to early infancy.....	2	6	6	9	4	2	6	9	4	15	2	7
153. Lack of care.....		2	2	3		5	7	7	6	8	6	6

XII. DISEASES OF OLD AGE.

154. Senile debility.....	109	106	136	74	106	70	70	93	56	86	89	95
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XIII. EXTERNAL CAUSES.

A.—Suicides.

155. Suicide by poison.....	11	12	25	11	17	8	22	7	13	13	13	11
156. Hanging or strangulation.....	1	2	1		2							
157. Drowning.....	4	2	1	3	2	6	4	1	7	6	5	7
158. Firearms.....	4	2	2	2	2	4		4	1	1		
159. Firearms.....	4	6	7	9	9	13	9	7	10	8	10	13
160. Cutting instruments.....												
161. Jumping from high places.....	1	1		1	1	3	1		1			2
162. Crude drugs.....		1		1	1		1		1			
163. Other suicides.....						1	1					

B.—Accidents.

164. Fractures.....	10	17	17	9	12	7	3	7	11	4	9	7
165. Dislocations.....	1		1		1				2	2		1
166a. Accidental gunshot wounds.....	6		2		4	5	5		6	7	7	9
166b. Injuries by machinery.....	2	3	3		2	3	6		3	3	6	3
166c. Injuries in mines and quarries.....	15	5	3	2								
166d. Railroad accidents and injuries.....	49	20	28	29	42	45	48	57	57	50	40	45
166e. Injuries by horses and vehicles.....	12	7	4	7	6	7	6	6	13	14	8	
166f. Other accidental traumas.....	14	36	26	37	39	22	25	34	24	49	28	32
167. Burns and scalds.....	23	17	14	25	11	10	17	14	13	20	23	20
168. Burns from corrosive substances.....												
169. Sunstroke.....	2	2				2	18	6			1	1
170. Freezing.....	2		1									
171. Electric shock.....	7	3	5	3	2	9	9	5	3	2	3	2
172. Accidental Drowning.....	7		6	3	10	34	51	19	7	6	3	4
173. Inanition (starvation).....												
174. Absorption of deleterious gases (non-suicidal).....	2	6	3	4	3	3	7	2	5	1	2	1
175. Other acute poisonings.....	3	2	1	3	1				2	4	2	3
176. Other external violence.....	4	5	8	9	9	10	11	6	9	15	8	10
	19	17	19	14	11	6	14	8	16	15	8	10

TABLE No. 2—Continued.

	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
<i>C. — Homicides</i>												
176a. Homicide.....	2	7	10	7	13	8	13	12	11	13	14	12
176b. Mob violence.....												
XIV. CAUSES UN-DEFINED.												
177. Dropsy.....	6	4	9	8	3	6	9	4	3	7	8	6
178. Sudden death.....	1					2						
179. Unspecified or ill-defined causes of death.....	13	24	13	23	11	6	24	50	33	30	25	17
XV. STILLBIRTHS.												
180. Stillbirths.....	170	176	192	161	176	138	168	175	149	153	167	195
Grand total.....	3,126	3,413	3,622	2,961	2,914	2,615	3,133	3,376	2,887	2,890	2,671	2,923

TABLE No. 2—Continued.

Deaths from all Causes, by Months, Ages, Color, Nationality and Condition, for the Year Ending December 31, 1907. International Classification.

		0	1	2	3	4	5	10	15	20	25	30	35	40	45	50	55	60	65	70
I. GENERAL DISEASES—EPIDEMIC.																				
1.	Typhoid fever.....	8	7	13	13	10	58	92	145	126	94	79	67	46	41	32	24	28	65	16
2.	Exanthematic typhus.....																			
3.	Recurrent fever.....																			
4.	Intermittent and malarial fever.....	4	7	3	1		4		4	10	4	2	4	4	1	2	1		4	
5.	Varicella or smallpox.....	1			1					1	1		1						1	
6.	Measles.....	49	55	30	9	6	20	6	7	3	6	1	6	4	2	2		3	1	
7.	Scarlatina.....	4	7	15	13	7	31	8	5		1									
8.	Whooping cough.....	73	39	14	8		1													
9.	Croup.....	5	3	3	2	1	3													
9a.	Diphtheria.....	15	31	32	49	29	124	32	7	8	3	1	2		1		1			
10.	Influenza.....	26	12	5	3		4	6	11	11	5	18	14	9	23	26	38	24	73	
11.	Miliary fever.....																			
12.	Asiatic cholera.....																			
13.	Cholera nostras.....							1	1				1		1			3	2	
14.	Dysentery.....			13	3	2	7	2		4	1	2	8	2	1	13	12	16	17	
15.	Bubonic plague.....																			
16.	Yellow fever.....																			
17.	Leprosy.....																			
18.	Erysipelas.....	23	1						3	1	2	3	2	3	3	1	5	5	10	
19.	Other epidemic diseases.....	3			2	1														
20.	Purulent septicemia and infection.....	17	1		3	1	11	8	7	12	13	7	7	11	10	3	3	9	12	
21.	Glanders and farcy.....																			
22.	Malignant pustule and anthrax.....								1						1					
23.	Rabies.....											2			1					
24.	Actinomycosis, trichinosis, etc.....															1				

TABLE No. 2—Continued.

	0	1	2	3	4	5	10	15	20	25	30	35	40	45	50	55	60	65	70
25. Pellets.	1					1		2	4	6	11	5	1	5	6	4	2	1	
26. Tuberculosis of the larynx.	62	31	19	6	10	66	66	364	619	511	419	313	233	233	191	101	151	162	
27. Tuberculosis of the lungs.	46	38	21	16	11	21	12	10	11	9	5	5	2	8	8	1	1	1	
28. Tuberculosis of the meninges.	15	7	4		3	7	7	17	17	30	21	10	13	16	19	11	14	11	
29. Abdominal tuberculosis.																			
30. Pott's disease.																			
31. Cold abscess.																			
32. White swelling.	1	2	3		1	1	1	4	1	1	1	1	1	1	1	1	1	1	
33. Tuberculosis of other organs.	3	2	1		3	3	3	2	3	5	4	4	2	3	3	10	4	4	
34. General tuberculosis.	4	5	1	1	1	3	4	10	10	7	6	2	2	2	3	1	6	1	
35. Scrofula.																			
36. Syphilis.	3	1	1					1	2	6	5	2	5	5	1	1	2	2	
36a. Soft chancre.																			
37. Gonorrhea (5 years and over).										1									
38. Gonorrhea (under 5 years).																			
39. Cancer and other malignant tumors of the buccal cavity.									1				1	3	3	4	7	10	13
40. Cancer and other malignant tumors of the stomach and liver.						2			1	2	3	11	26	45	51	80	88	102	
41. Cancer and other malignant tumors of the peritoneum, intestines and rectum.										4	7	13	13	16	12	19	26	20	
42. Cancer and other malignant tumors of the female genital organs.									2	2	9	14	27	37	27	29	30	14	
43. Cancer and other malignant tumors of the breast.									1	2	1	6	14	21	17	11	14	13	
44. Cancer and other malignant tumors of the skin.							1												
45. Cancer and other malignant tumors of other organs.						3		5	2	2	10	4	16	30	32	27	40	40	
46. Other tumors.		1				1	1	1	1	2	1	2	2	3	4	2	4	8	
47. Acute articular rheumatism.					6	8	8	11	6	6	5	6	5	3	5	9	7	6	
48. Chronic rheumatism and gout.						3	1	1	1		1		1	1	1	3	11	11	
49. Scoury.	2														2				
50. Diabetes.		1	1	1		11	11	2	12	9	9	6	10	15	16	23	36	31	
51. Exophthalmic goitre.								2	2			1	2	3	4	1	3	4	
52. Addison's disease.																			
53. Leukemia.		1		1	1		1		2	1		1	5	1	1	2	1	1	3

114.	Other diseases of the liver	23	4	2	1	2	1	3	2	4	2	11	7	11	12	16	25	25
115.	Diseases of the spleen	11	4	1	1	1	11	15	15	21	25	13	28	15	9	9	5	7
116.	Simple peritonitis (non-puerperal)																	
117.	Other diseases of the digestive system (cancer and tuberculosis excepted)		1		1	2	15	41	27	29	12	12	10	15	7	1	2	4
118.	Appendicitis and abscess of the iliac fossa	3																

VI. DISEASES OF THE GENITO-URINARY SYSTEM.

119.	Acute nephritis	9	7	5	8	2	8	4	5	7	8	6	5	8	13	6	9	10
120.	Bright's disease	17	4	4	3	7	5	12	13	24	24	42	57	71	87	113	140	175
121.	Other diseases of the kidneys and their adnexa	1							1	1		3	1	3	2	4	3	4
122.	Calculi of the urinary tract	1													1	6	4	6
123.	Diseases of the bladder	1									1	1	2	2	1	1	4	8
124.	Diseases of the urethra, urinary abscess, etc.																	
125.	Diseases of the prostate									2			1		2	3	1	2
126.	Non-venereal diseases of the male genital organs															4	3	6
127.	Gonorrhea									1	1	1	3	3				
128.	Uterine hemorrhage (non-puerperal)										1							
129.	Uterine tumor (non-cancerous)										1	2	1	4	8	4	1	
130.	Other diseases of the uterus							1	4	7	3	4	4	3	3	2		2
131.	Cysts and other tumors of the ovary									2	2	1	4	4	2		1	4
132.	Other diseases of the female genital organs	2								7	2	5	3	1			2	4
133.	Non-puerperal diseases of the breast (cancer excepted)	1															1	

VII. PUERPERAL DISEASES.

134.	Accidents of pregnancy											8	10	3				
135.	Puerperal hemorrhage								2	7	10							
136.	Other accidents of labor									1	4	5	12	4				
137.	Puerperal septicemia								21	44	46	50	29	5	1			1
138.	Puerperal albuminuria and convulsions																	
139.	Phlegmasia alba dolens (puerperal)								13	13	11	5	8	3	2			
140.	Other puerperal accidents—sudden death								1	1	2	4	5	1				
141.	Puerperal diseases of the breast								1									

VIII. DISEASES OF THE SKIN AND CELLULAR TISSUES.

142.	Gangrene	2						1				1					1	13
143.	Carbuncle	1															1	3
144.	Acute abscess, phlegmon	10	2				1			1	1	1	2				1	1
145.	Other diseases of the skin and its adnexa		2														1	1

TABLE No. 2—Continued.

		0	1	2	3	4	5	10	15	20	25	30	35	40	45	50	55	60	65
IX. DISEASES OF THE LOCOMOTOR SYSTEM.																			
146.*	Non-tuberculous diseases of the bones.....	8	3	2	2	1	1	4	1	2	1			2				1	
147.	Arthritis and other diseases of the joints (tuberculous and rheumatism excepted).....	1												1					
148.	Amputation.....																		
149.	Other diseases of the organs of locomotion.....																		
X. MALFORMATIONS.																			
150.	Malformations.....	257	5	1			3												
XI. DISEASES OF INFANCY.																			
151.*	Congenital debility, icterus, sclerema.....	1,660																	
152.	Other diseases peculiar to early infancy.....	71																	
153.	Lack of care.....	52																	
XII. DISEASES OF OLD AGE.																			
154.	Senile debility.....															1	2	6	18
XIII. EXTERNAL CAUSES.																			
A.—Suicides.																			
155.	Suicide by poison.....																		
156.	Asphyxia.....						2	12		26	17	17	21	6	12	11	12	10	5
157.	Strangulation.....									1	3	1	2	1	3	11	7	0	1
158.	Drowning.....									2	8	1	2	3	2	1	3	1	2
159.	Fires.....								7	10	14	12	15	14	8	4	6	7	4
160.	Cutting instruments.....												3		1		3	2	
161.	Jumping from high places.....										1		1		1				
162.	Crushing.....																	1	
163.	Other suicides.....								1										

TABLE No. 2—Continued.

Deaths from all Causes, by Months, Ages, Color, Nationality and Condition, for the Year Ending December 31, 1907. International Classification.

	I. GENERAL DISEASES. EPIDEMIC.					White.	Colored.	American.	Foreign.	Not Reported.	Single.	Married.	Widowed.	Not Reported.	Total.
	70 to 75	75 to 80	80 to 90	90 and over.	Unknown.										
1. Typhoid fever.....	17	10	5	.....	2	902	31	884	58	11	494	383	60	6	933
2. Exanthematous typhus.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
3. Recurrent fever.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
4. Intermittent and malarial fever.....	6	10	9	1	1	75	6	76	4	1	29	30	18	4	81
5. Variola or smallpox.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
6. Measles.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
7. Scarlatina.....	.....	2	1	.....	.....	205	8	207	4	2	186	22	4	1	213
8. Whooping cough.....	.....	.....	.....	.....	.....	89	8	89	1	1	91	.....	.....	.....	91
9. Croup.....	.....	.....	.....	.....	.....	138	8	136	.....	.....	136	.....	.....	.....	136
9a. Diphtheria.....	.....	.....	.....	.....	.....	17	.....	17	.....	.....	17	.....	.....	.....	17
10. Influenza.....	94	89	151	23	1	327	9	328	3	5	324	12	.....	.....	336
11. Milary fever.....	.....	.....	.....	.....	.....	651	15	551	110	5	100	287	277	2	666
12. Asiatic cholera.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
13. Cholera nostras.....	2	5	3	.....	.....	18	1	15	4	.....	4	9	6	.....	19
14. Dysentery.....	38	43	49	7	2	239	3	192	44	6	49	79	110	4	242
15. Bubonic plague.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
16. Yellow fever.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
17. Leprosy.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
18. Erysipelas.....	8	4	3	.....	.....	75	2	71	6	.....	33	25	19	.....	77
19. Other epidemic diseases.....	.....	.....	.....	.....	.....	5	1	5	1	.....	6	.....	.....	.....	6
20. Purulent septicemia and infection.....	7	12	9	.....	3	159	7	147	17	2	66	69	27	4	166
21. Glanders and farcy.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
22. Malignant pustule and anthrax.....	.....	.....	.....	.....	.....	2	.....	2	.....	.....	.....	.....	.....	.....	2
23. Rabies.....	.....	.....	.....	.....	.....	3	.....	3	.....	.....	.....	.....	.....	.....	3
24. Actinomycosis, trichinosis, etc.....	.....	.....	.....	.....	.....	1	.....	1	.....	.....	.....	.....	.....	.....	1

TABLE No. 2—Continued.

	70 to 75	76 to 80	80 to 90	90 and over	Unknown.	White.	Colored.	American.	Foreign.	Not Reported.	Single.	Married.	Widowed.	Not Reported.	Total.
II. LOCAL DISEASES—DISEASES OF THE NERVOUS SYSTEM AND ORGANS OF SPECIAL SENSE.															
60. Encephalitis.						55	1	53	1	2	44	7	4	1	56
61. Simple meningitis.	3	1	1	1		368	16	373	6	5	317	58	7	2	394
61a. Epidemic cerebro-spinal meningitis.	4	1	2	2	3	177	3	177	3		159	16	5		180
62. Progressive locomotor ataxia.	9	2	1			44	1	39	6		6	33	7		45
63. Other diseases of the spinal cord.	15	13	8	2	1	125	2	112	14	1	34	60	23	1	127
64. Congestion and hemorrhage of the brain.	273	194	198	25	6	1,532	47	1,348	233	18	187	829	570	13	1,999
65. Softening of the brain.	19	22	19	1	1	111	1	95	17		13	54	44	1	112
66. Paralysis, cause unspecified.	102	139	134	14	1	672	19	567	113	11	63	317	305	6	691
67. General paralysis.	16	15	12	1		112	4	91	20	5	17	69	28	2	116
68. Other forms of insanity.	7	1			3	71	4	58	9	8	18	34	17	6	75
69. Epilepsy.	3	5	3		2	131	11	127	8	7	99	27	12	4	142
70. Convulsions (non-puerperal; 5 years and over).	1					8	2	10		3	3	6	1		10
71. Convulsions (under 5 years).	2					212	9	216	1	4	221		1		221
72. Tetanus.						57	2	55	2	2	50	8	1		59
73. Chorea.						7		6		1	4	2		1	7
74a. Other diseases of the brain.	3	3	1			72	1	70	2	1	34	33	6		73
74b. Other diseases of the nervous system.	5	2	6			57	1	56	2		6	36	16		58
75. Diseases of the eye and its adnexa.															
76. Diseases of the ear.	1	1				13		15	3		13	4	1		18
III. DISEASES OF THE CIRCULATORY SYSTEM.															
77. Pericarditis.	3	3	2	2	1	45	3	41	6	1	12	25	11		48
78. Acute endocarditis.	17	14	14	2	1	132	10	118	39	5	36	77	47	2	162
79. Organic diseases of the heart.	412	373	353	24	5	2,335	172	2,305	413	48	327	1,430	972	27	2,765
80. Angina pectoris.	44	58	15			260	2	207	43	2	12	144	166		232
81. Diseases of the arteries, atheroma, aneurism, etc.	50	58	57	6	1	238	6	197	65	2	18	186	109	1	264
82. Embolism and thrombosis.															
83. Diseases of the veins (varicose, hemorrhoids, phlebitis, etc.).	5	7	3			54	3	49	8		9	38	12		57
84. Diseases of the lymphatic system (lymphangitis, etc.).		1	1			10		8	2		2	1	1		10
85. Hemorrhages.						36		35	3						4
86. Other diseases of the circulatory system.	1	2				39		38	3	1	22	13	4		39

TABLE No. 2—Continued.

	70 to 75	75 to 80	80 to 90	90 and over.	Unknown.	White.	Colored.	American.	Foreign.	Not Reported.	Single.	Married.	Widowed.	Not Reported.	Total
124. Diseases of the urethra, urinary abscess, etc.		2	2			11		6	6		3	6	2		11
125. Diseases of the prostate.	25	17	14	1	1	72	3	61	13	1	5	56	13	1	75
126. Non-venereal diseases of the male genital organs.						1		1					1		1
127. Metritis.			1			4		4			2	1	1		4
128. Uterine hemorrhage (non-puerperal).						7		7				7			7
129. Uterine tumor (non-cancerous).		2				28	3	27	4		4	21	6		31
130. Other diseases of the uterus.		1				31		33	2		7	22	6		35
131. Cysts and other tumors of the ovary.	2		2			23	2	23	2		4	13	7	1	35
132. Other diseases of the female genital organs.						19	1	20			4	12	4		26
133. Non-puerperal diseases of the breast (cancer excepted).						1		1				1			20
VII. PUERPERAL DISEASES.															
134. Accidents of pregnancy.					1	40	1	39	2		1	38	2		41
135. Puerperal hemorrhage.						26		23	3			25	1		26
136. Other accidents of labor.						11		10	2			11	1		12
137. Puerperal septicemia.						190	6	183	11	2	3	182	11		190
138. Puerperal albuminuria and convulsions.						50	5	51	4			54	1		55
139. Pnigmasia alba dolens (puerperal).						13	1	13	1			14			14
140. Other puerperal accidents—sudden death.						1		1				1			1
141. Puerperal diseases of the breast.															
VIII. DISEASES OF THE SKIN AND CELLULAR TISSUES.															
142. Gangrene.	18	21	31	6	1	113	2	96	16	3	6	43	64	2	115
143. Carbuncle.	1					14		11	3		4	6	4		14
144. Acute abscess, phlegmon.			1			14		13			6	7	1		14
145. Other diseases of the skin and its adnexa.	1	2				21		17	4		14	1	6		21
IX. DISEASES OF THE LOCOMOTOR SYSTEM.															
146. Non-tuberculous diseases of the bones.	1	3	1			32	1	30	3		25	6	2		33
147. Arthritis and other diseases of the joints (tuberculous and rheumatism excepted).		1				2		2			2				2
148. Amputation.						1		1				1			1
149. Other diseases of the organs of locomotion.	1					1		1							1

X. MALFORMATIONS.

X. MALFORMATIONS.															
150. Malformations.....						263	3	266				266			266
XI. DISEASES OF INFANCY.															
151. Congenital debility, tetanus, eclerema.....						1,619	41	1,600				1,600			1,600
152. Other diseases peculiar to early infancy.....						66	5	71				71			71
153. Lack of care.....						50	2	52				52			52
XII. DISEASES OF OLD AGE.															
154. Senile debility.....	99	213	596	153	2	1,068	22	813	253	24	63	268	703	17	1,090
XIII. EXTERNAL CAUSES.															
A.—Suicides.															
155. Suicide by poison.....	4	2	5		1	156	7	142	14	7	29	105	22	7	163
156. Asphyxia.....						6		4	1		1	3	1		6
157. Hanging or strangulation.....	4	3	2		1	50		35	11	4	6	28	13	3	50
158. Drowning.....	2		1			19		15	3	1	4	10	4	1	19
159. Freezing.....	1		3			105		93	9	3	23	68	13	1	105
160. Cutting instruments.....		1				11		7	4		1	7	3		11
161. Jumping from high places.....			1			4		3		1	2		2		4
162. Crushing.....					1	1		1				1			1
163. Other suicides.....						2		2							2
B.—Accidents.															
164. Fractures.....	7	14	30	8	1	111	2	93	17	3	20	38	62	3	113
165. Dislocations.....	1		2			17		2	5		2	1	4		7
166a. Accidental gun shot wounds.....					1	46		44	2		36	9			46
166b. Injuries by machinery.....					1	44	5	41	5	3	18	26	2	3	49
166c. Injuries in mines and quarries.....		1			6	53		25	27	1	21	31		1	53
166d. Railroad accidents and injuries.....	10	6	8	2	22	493	15	370	84	54	194	213	46	55	598
166e. Injuries by horses and vehicles.....	17	4	2			79	1	71	8		33	35	10	2	80
166f. Other accidental traumas.....	17	22	43	10	5	399	7	299	61	6	122	159	76	9	366
167. Burns and scalds.....		7	2	1	2	201	6	188	17	2	118	63	24	2	207
168. Burns from corrosive substances.....															
169. Sunstroke.....		1	3	1		22	4	19	6	1	3	14	8	1	26
170. Freezing.....	2		1			6	1	6	1		4	2	1		7
171. Electric shock.....	1					45		41	4		23	21	1		45
172. Accidental drowning.....		1	1		6	147	6	122	19	12	106	31	3	13	153
173. Inanition (starvation).....	4	3	2	1		36	3	34	5		21	9	8	1	39
174. Absorption of deleterious gases (non suicidal).	2		4			20	2	14	7		9	7	5		21
175. Other acute poisonings.....	2		1		1	102	2	97	4	3	68	29	7		104
176. Other external violence.....	7	1	2			145	9	149	7	1	135	14	6	2	157

TABLE No. 2—Continued.

	70 to 75	75 to 80	80 to 90	90 and over.	Unknown	White.	Colored.	American	Foreign.	Not Reported.	Single.	Married.	Widowed.	Not Reported.	Total
<i>C.—Homicides.</i>															
176a. Homicide.	1	1			4	95	27	99	13	10	52	51	11	8	122
176b. Mob violence.															
<i>XIV. CAUSES ILL DEFINED.</i>															
177. Dropsy.	11	8	10	2	2	69	4	63	9	1	11	30	31	1	73
178. Sudden death.						3		3				3			3
179. Unspecified or ill-defined causes of death.	15	10	3	1	4	272	6	256	17	5	198	51	18	11	278
<i>XV. STILLBIRTHS.</i>															
180. Stillbirths.						1,941	78	2,019			2,019				2,019
Grand total.	2,604	2,464	2,833	402	147	35,001	1,460	32,214	3,734	513	15,446	13,298	7,347	380	36,461

TABLE No. 2A.

*Recapitulation of Table No. 2—Classified Deaths by Months, Ages, Color, Nationality and Conjugal Condition,
Year 1907.*

	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
I. General diseases.—Epidemic.	810	912	1,062	876	791	712	804	908	803	763	722	725
II. Diseases of the nervous system and organs of sense.	360	350	365	366	338	305	323	344	306	301	276	340
III. Diseases of the circulatory system.	280	277	315	300	318	304	299	275	291	309	299	336
IV. Diseases of the respiratory system.	534	750	601	847	336	200	100	107	121	190	290	365
V. Diseases of the digestive system.	234	207	276	239	219	288	689	819	530	369	235	216
VI. Diseases of the genito-urinary system.	202	195	217	173	191	174	170	167	172	161	192	188
VII. Puerperal diseases.	31	34	41	36	34	27	30	25	19	22	23	23
VIII. Diseases of the skin and cellular tissues.	16	19	15	9	14	12	16	16	11	12	9	15
IX. Diseases of the locomotor system.	4	2	3	1	2	1	3	2	7	3	3	6
X. Malformations.	20	15	17	24	22	28	21	20	28	30	12	29
XI. Diseases of infancy.	152	169	146	145	152	131	137	169	140	141	135	166
XII. Diseases of old age.	109	106	136	74	106	70	70	93	56	86	89	96
XIII. External causes.	184	173	194	179	201	211	270	202	218	235	196	201
XIV. Causes ill-defined.	20	28	22	31	14	14	33	54	36	46	33	23
XV. Stillbirths.	170	176	192	161	176	138	168	175	149	152	167	195
Total.	3,126	3,413	3,622	2,961	2,914	2,615	3,133	3,376	2,887	2,890	2,671	2,923

TABLE No. 2A—Continued.

	0	1	2	3	4	5	10	15	20	25	30	35	40	45	50	55	60	65
I. General diseases.—Epidemic.....	408	256	181	133	87	347	278	621	879	743	654	549	485	567	529	521	585	608
II. Diseases of the nervous system and organs of sense.....	478	120	63	35	21	97	65	58	66	62	84	116	90	174	172	220	300	434
III. Diseases of the circulatory system.....	47	6	4	4	1	21	35	34	55	62	70	117	105	177	202	249	400	482
IV. Diseases of the respiratory system.....	756	244	106	64	36	78	41	73	96	104	101	121	100	114	167	184	218	278
V. Diseases of the digestive system.....	1,458	486	114	45	21	71	80	63	89	70	84	102	121	135	128	164	201	216
VI. Diseases of the genito-urinary system.....	37	11	9	11	9	13	17	24	54	43	64	84	99	117	130	166	203	263
VII. Puerperal diseases.....	15	4	3	2	1	1	1	38	66	73	73	71	17	5	9	5	14	18
VIII. Diseases of the skin and cellular tissues.....	9	3	2	2	1	1	4	1	2	1	3	2	2	4	5	1	1	...
IX. Diseases of the locomotor system.....	267	5	1	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...
X. Malformations.....	1,783	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
XI. Diseases of infancy.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
XII. Diseases of old age.....	173	54	48	26	31	69	78	151	236	189	169	184	139	137	121	129	110	104
XIII. External causes.....	169	10	5	3	...	2	2	4	1	4	15	1	8	7	16	6	13	23
XIV. Causes ill-defined.....	2,019	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
XV. Stillbirths.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total.....	7,899	1,218	535	323	210	703	601	1,067	1,544	1,300	1,316	1,347	1,166	1,437	1,491	1,636	2,031	2,434

TABLE No. 2A—Continued.

	70 to 75	75 to 80	80 to 90	90 and over.	Unknown.	White.	Colored.	American.	Foreign.	Not Reported.	Single.	Married.	Widowed.	Not Reported.	Total.
I. General diseases—Epidemic.	545	454	416	47	35	9,418	490	8,919	894	125	3,702	4,445	1,674	87	9,908
II. Diseases of the nervous system and organs of sense.	463	401	385	44	16	3,550	124	3,426	440	65	1,288	1,593	1,056	37	3,974
III. Diseases of the circulatory system.	532	493	446	34	9	3,452	151	2,995	579	59	1,461	1,869	1,243	30	3,933
IV. Diseases of the respiratory system.	330	325	370	44	9	3,758	193	3,565	493	42	1,667	1,324	910	30	3,931
V. Diseases of the digestive system.	220	196	215	25	9	4,184	137	3,942	340	39	2,555	1,143	594	29	4,321
VI. Diseases of the genito-urinary system.	295	266	247	23	8	2,111	91	1,812	356	34	319	1,207	654	22	2,202
VII. Puerperal diseases.	20	23	32	6	1	1,331	14	1,300	23	2	4	325	15	1	2,345
VIII. Diseases of the skin and cellular tissues.	2	4	1	1	1	162	2	138	23	3	30	57	75	2	164
IX. Diseases of the locomotor system.						36	1	34	3		27	8	2		37
X. Malformations.						263	3	266			266				266
XI. Diseases of infancy.						1,735	48	1,783			1,783				1,783
XII. Diseases of old age.	99	213	596	163	2	1,068	22	813	253	24	63	268	752	17	1,000
XIII. External causes.	72	68	112	23	51	2,068	96	2,016	334	114	1,053	975	323	113	2,464
XIV. Causes ill-defined.	26	18	13	3	6	2,344	10	2,344	26	6	2,009	84	49	12	2,354
XV. Stillbirths.						1,941	78	2,019			2,019				2,019
Total.	2,604	2,464	2,833	402	147	35,001	1,460	32,214	3,734	513	15,446	13,288	7,347	380	36,401

TABLE No. 3.
Deaths in Indiana by Months, Counties, Ages, Sex, Color, Nationality and Conjugal Condition, 1907.

COUNTIES	Sex.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Adams.....	Total.....	20	23	28	24	17	12	16	22	15	14	20	19
	Male.....	7	11	8	10	7	9	9	12	10	7	13	9
	Female.....	13	12	20	14	10	3	7	10	5	7	7	10
Allen.....	Total.....	96	113	106	77	89	88	84	96	97	100	75	107
	Male.....	50	57	52	41	49	51	51	55	55	58	47	60
	Female.....	46	56	54	36	40	37	32	45	42	42	28	57
Bartholomew.....	Total.....	27	42	37	31	33	27	35	39	23	23	23	25
	Male.....	14	19	18	16	13	14	14	22	16	13	10	12
	Female.....	13	23	19	15	20	13	21	17	6	10	13	13
Benton.....	Total.....	23	11	19	11	12	12	17	10	7	6	11	8
	Male.....	14	7	11	5	7	4	12	3	4	4	6	6
	Female.....	9	4	8	6	5	8	5	7	3	2	5	2
Blackford.....	Total.....	14	20	20	19	16	14	20	24	23	20	13	17
	Male.....	7	12	10	11	10	7	13	10	12	9	7	11
	Female.....	7	8	10	8	6	7	7	14	11	11	6	6
Boone.....	Total.....	30	32	35	27	41	16	35	34	28	16	13	22
	Male.....	18	18	15	17	22	3	20	17	16	5	7	10
	Female.....	12	14	20	10	19	13	15	17	12	11	6	12
Brown.....	Total.....	10	18	11	14	7	11	9	14	14	10	8	11
	Male.....	2	9	5	6	6	6	6	9	6	4	6	6
	Female.....	8	9	6	8	3	5	4	5	8	6	2	5
Carroll.....	Total.....	28	20	24	18	20	8	9	15	18	22	17	21
	Male.....	13	7	11	14	10	4	3	10	9	13	9	11
	Female.....	15	13	13	4	10	4	6	5	9	9	8	10

Cass.....	Total.....	49	42	51	40	35	27	45	40	25	45	45	48
	Male.....	21	24	27	21	21	14	26	27	15	19	19	26
	Female.....	18	18	24	19	14	13	16	13	10	26	26	22
Clark.....	Total.....	26	37	37	26	35	53	42	50	23	39	39	43
	Male.....	17	16	20	17	21	22	26	26	11	24	24	29
	Female.....	19	21	17	9	14	31	16	24	12	15	15	14
Clay.....	Total.....	47	40	31	34	31	37	43	44	32	27	27	35
	Male.....	26	22	17	21	21	27	16	22	20	19	19	19
	Female.....	21	18	14	13	10	10	27	22	12	8	8	16
Cinton.....	Total.....	28	37	33	33	34	25	19	29	32	24	24	35
	Male.....	16	17	14	21	25	11	9	16	19	12	12	17
	Female.....	22	23	15	12	9	14	10	13	13	12	12	18
Crawford.....	Total.....	11	25	17	17	15	15	11	7	11	7	7	11
	Male.....	5	10	8	8	4	6	7	3	6	4	4	5
	Female.....	6	11	9	9	11	9	4	4	5	3	3	6
Davies.....	Total.....	37	27	25	33	16	31	29	36	33	29	29	28
	Male.....	19	16	16	19	8	14	15	15	17	15	15	15
	Female.....	18	11	9	14	8	17	14	21	16	14	14	12
Dearborn.....	Total.....	26	28	30	24	19	31	19	16	30	32	32	37
	Male.....	14	6	15	9	13	14	10	7	15	17	17	20
	Female.....	12	14	15	15	6	17	9	9	15	15	15	17
Decatur.....	Total.....	27	24	17	19	19	20	36	25	25	21	21	24
	Male.....	15	11	11	9	8	10	19	18	12	11	11	9
	Female.....	12	11	6	10	11	10	17	7	13	10	10	15
Dekalb.....	Total.....	33	40	24	28	19	18	31	19	21	20	20	26
	Male.....	14	19	16	13	12	12	10	14	12	10	10	14
	Female.....	19	21	11	13	7	6	21	5	9	10	10	12
Delaware.....	Total.....	61	63	59	55	52	69	78	51	51	42	42	38
	Male.....	33	32	32	33	24	44	34	26	22	24	24	19
	Female.....	28	31	27	23	28	25	44	25	29	18	18	17
Dubois.....	Total.....	17	23	21	22	16	24	20	19	29	20	20	17
	Male.....	10	14	10	9	8	14	11	16	16	13	13	10
	Female.....	6	8	11	13	8	10	9	3	13	8	8	7
Elbert.....	Total.....	61	84	46	65	49	43	53	52	55	47	47	45
	Male.....	26	40	16	33	20	23	28	24	32	23	23	19
	Female.....	35	44	30	32	29	20	25	28	23	24	24	26

TABLE No. 3—Continued.

COUNTIES.	Sex.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Fayette	Total.....	17	23	9	17	11	13	15	17	16	18	11	12
	Male.....	8	7	4	6	7	9	9	9	8	11	8	7
	Female.....	9	16	5	11	4	4	6	8	10	7	3	5
Floyd	Total.....	38	48	40	51	40	43	36	33	25	25	42	33
	Male.....	19	25	19	24	18	23	21	21	12	12	16	16
	Female.....	19	23	21	27	22	20	15	12	13	12	26	17
Fountain	Total.....	25	29	33	21	15	15	18	30	29	22	20	27
	Male.....	13	14	17	16	6	10	7	17	13	10	11	15
	Female.....	12	15	16	5	9	5	11	13	16	12	9	12
Franklin	Total.....	26	16	19	14	20	12	16	19	14	24	18	14
	Male.....	15	12	15	8	8	7	11	10	8	12	11	5
	Female.....	11	4	4	6	12	5	5	9	6	12	7	9
Fulton	Total.....	13	21	26	12	16	15	10	23	15	17	14	18
	Male.....	5	11	12	6	8	6	4	13	8	10	9	13
	Female.....	8	10	14	6	8	10	6	10	7	7	5	5
Gibson	Total.....	26	45	40	32	22	38	44	34	30	28	25	20
	Male.....	11	25	19	21	16	21	18	19	13	14	13	10
	Female.....	15	20	21	11	6	17	26	15	17	14	12	10
Grant	Total.....	67	72	105	76	78	54	65	80	64	62	62	56
	Male.....	36	37	69	50	47	34	39	49	42	41	32	35
	Female.....	31	35	36	26	31	20	26	31	22	21	30	20
Greene	Total.....	34	48	44	31	51	27	47	35	40	31	46	36
	Male.....	19	21	19	19	23	14	27	16	22	11	26	19
	Female.....	15	27	25	12	28	13	20	19	18	20	20	17
Hamilton	Total.....	26	36	54	32	18	18	29	41	22	27	29	25
	Male.....	12	15	22	16	13	7	16	24	10	16	15	13
	Female.....	14	21	22	16	5	11	13	17	12	11	14	12

Hancock.....	Total.....	15	38	40	23	16	23	26	33	34	23	19	24
Male.....	Male.....	7	20	20	12	9	10	9	15	16	11	11	11
Female.....	Female.....	8	18	20	10	7	14	10	18	26	12	8	13
Harrison.....	Total.....	15	20	31	17	16	31	28	15	25	25	20	19
Male.....	Male.....	4	9	16	10	5	19	8	8	11	8	8	10
Female.....	Female.....	11	11	15	7	11	12	9	7	14	17	12	9
Hendricks.....	Total.....	26	27	37	25	24	27	20	25	25	24	22	21
Male.....	Male.....	13	16	14	13	12	12	12	11	14	19	12	12
Female.....	Female.....	13	11	23	12	12	15	8	11	8	5	10	9
Henry.....	Total.....	30	40	37	31	21	24	47	35	33	24	17	33
Male.....	Male.....	13	21	16	10	13	12	22	17	17	16	9	14
Female.....	Female.....	17	19	21	21	8	12	25	18	16	8	8	19
Howard.....	Total.....	27	49	33	40	37	31	28	33	41	26	38	26
Male.....	Male.....	16	23	15	19	17	17	14	14	17	18	19	15
Female.....	Female.....	11	26	18	21	20	14	14	16	24	8	20	11
Huntington.....	Total.....	36	27	32	31	27	27	31	22	31	33	28	31
Male.....	Male.....	20	10	15	18	15	16	18	11	14	14	17	21
Female.....	Female.....	16	17	17	13	12	11	13	11	17	19	11	10
Jackson.....	Total.....	33	26	36	41	23	34	40	30	23	34	25	34
Male.....	Male.....	17	12	18	17	11	22	23	15	11	14	13	16
Female.....	Female.....	16	14	18	24	12	12	17	15	12	20	12	18
Jasper.....	Total.....	15	21	16	24	20	11	6	11	11	14	9	13
Male.....	Male.....	7	15	10	13	11	5	3	7	6	6	7	7
Female.....	Female.....	8	6	6	11	9	6	3	4	5	8	2	6
Jay.....	Total.....	35	12	37	29	28	15	33	49	30	27	22	25
Male.....	Male.....	20	6	18	13	17	9	19	24	12	12	12	12
Female.....	Female.....	15	6	19	16	11	6	14	25	18	15	9	13
Jefferson.....	Total.....	26	84	35	30	22	18	34	37	33	28	21	27
Male.....	Male.....	14	14	20	13	12	12	19	13	21	15	14	9
Female.....	Female.....	12	20	15	17	10	6	15	24	12	13	7	18
Jennings.....	Total.....	13	21	23	12	22	16	19	19	20	16	8	12
Male.....	Male.....	6	9	8	8	11	9	8	6	12	6	1	9
Female.....	Female.....	7	12	15	4	11	7	11	13	8	10	7	3
Johnson.....	Total.....	22	27	26	26	23	20	32	30	31	24	24	17
Male.....	Male.....	16	13	15	18	13	15	18	18	21	8	11	9
Female.....	Female.....	6	14	11	8	10	5	14	12	10	16	13	8

TABLE No. 3—Continued.

COUNTIES.	Sex.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Fayette.	Total.....	17	23	9	17	11	13	15	17	16	18	11	12
	Male.....	8	7	4	6	7	9	9	8	10	11	8	7
	Female.....	9	16	5	11	4	4	6	9	6	7	3	5
Floyd.	Total.....	38	48	40	51	40	43	36	33	25	25	42	33
	Male.....	19	25	19	24	18	23	21	21	18	13	16	16
	Female.....	19	23	21	27	22	20	15	12	13	12	26	17
Fountain.	Total.....	25	29	33	21	15	15	18	30	29	22	20	27
	Male.....	13	14	17	16	6	10	7	17	13	10	11	15
	Female.....	12	15	16	5	9	5	11	13	16	12	9	12
Franklin.	Total.....	26	16	19	14	20	12	16	19	14	24	18	14
	Male.....	15	12	15	8	8	7	11	10	8	12	11	15
	Female.....	11	4	4	6	12	5	5	9	6	12	7	9
Fulton.	Total.....	13	21	26	12	16	15	15	10	23	17	14	18
	Male.....	5	11	12	6	8	5	4	4	13	8	9	13
	Female.....	8	10	14	6	8	10	6	6	10	10	5	5
Gibson.	Total.....	26	45	40	32	22	38	44	34	30	28	25	20
	Male.....	11	25	19	21	16	21	18	19	13	14	13	10
	Female.....	15	20	21	11	6	17	26	15	17	14	12	10
Grant.	Total.....	67	72	105	76	73	54	65	80	64	62	62	55
	Male.....	36	37	69	50	47	34	39	49	42	41	33	36
	Female.....	31	35	36	26	26	20	26	31	22	21	30	20
Greene.	Total.....	34	43	44	31	51	27	47	35	40	31	46	36
	Male.....	19	21	19	19	23	14	27	16	22	11	26	19
	Female.....	15	22	25	12	28	13	20	19	18	20	20	17
Hamilton.	Total.....	26	36	54	32	18	18	29	41	23	27	29	25
	Male.....	12	15	32	16	13	7	16	24	10	16	15	13
	Female.....	14	21	22	16	5	11	13	17	12	11	14	12

Hancock	Total	15	38	40	22	16	23	26	33	34	23	19	24
	Male	7	20	20	12	9	9	16	16	8	11	11	11
Harrison	Total	15	20	31	17	16	14	28	15	25	25	20	19
	Male	4	9	16	10	5	19	19	8	11	8	8	10
Hendricks	Total	11	11	15	7	6	12	9	7	14	17	13	9
	Male	11	11	15	7	6	12	9	7	14	17	13	9
Henry	Total	26	27	37	25	24	27	20	25	25	24	23	21
	Male	13	16	14	13	12	12	12	11	17	19	10	12
Howard	Total	30	40	37	31	21	24	47	35	33	24	17	33
	Male	13	21	16	10	13	12	26	17	16	16	8	14
Howard	Total	27	49	33	40	37	31	28	33	41	26	30	26
	Male	16	23	15	19	17	17	14	17	18	13	19	15
Huntington	Total	11	26	18	31	20	14	14	16	24	8	20	11
	Male	11	26	18	31	20	14	14	16	24	8	20	11
Jackson	Total	36	27	32	31	27	27	31	22	31	33	28	31
	Male	20	10	15	18	15	16	18	11	14	14	17	21
Jasper	Total	16	17	17	13	12	11	13	11	17	19	11	10
	Male	16	17	17	13	12	11	13	11	17	19	11	10
Jay	Total	33	26	36	41	23	34	40	30	23	34	25	34
	Male	17	12	18	17	11	22	23	15	11	14	13	16
Jefferson	Total	16	14	18	24	12	12	17	15	12	20	12	18
	Male	16	14	18	24	12	12	17	15	12	20	12	18
Jenn	Total	15	21	16	24	20	11	6	11	11	14	9	13
	Male	7	15	10	13	11	5	3	7	6	8	7	7
Jenn	Total	8	6	6	11	9	6	3	4	5	8	2	6
	Male	8	6	6	11	9	6	3	4	5	8	2	6
Johnson	Total	35	12	37	29	28	15	33	49	30	27	22	25
	Male	20	6	18	13	17	9	19	24	12	12	13	13
Johnson	Total	15	6	19	16	11	6	14	25	18	15	9	13
	Male	15	6	19	16	11	6	14	25	18	15	9	13
Johnson	Total	26	34	35	30	22	18	34	37	33	28	21	27
	Male	14	14	20	13	12	12	19	13	21	15	14	9
Johnson	Total	12	20	15	17	10	6	15	24	12	13	7	18
	Male	12	20	15	17	10	6	15	24	12	13	7	18
Johnson	Total	13	21	23	12	22	16	19	19	20	16	8	12
	Male	6	9	8	8	11	9	8	6	12	6	1	9
Johnson	Total	7	12	15	4	11	7	11	13	8	10	7	3
	Male	7	12	15	4	11	7	11	13	8	10	7	3
Johnson	Total	22	27	26	26	23	20	32	30	31	24	24	17
	Male	16	16	15	18	13	15	16	18	21	18	21	14
Johnson	Total	6	13	11	18	10	5	14	12	10	16	13	8
	Male	6	13	11	18	10	5	14	12	10	16	13	8

TABLE No. 3—Continued.

COUNTIES.	Sex.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Knox.....	Total.....	45	48	61	31	31	34	39	40	36	39	40	40
	Male.....	27	27	33	16	16	19	25	21	19	22	22	22
	Female.....	18	21	28	16	18	15	14	19	17	17	18	25
Kosciusko.....	Total.....	33	36	40	29	14	19	22	32	23	33	16	37
	Male.....	16	21	20	16	5	8	12	13	13	20	6	6
	Female.....	17	15	20	14	9	11	10	19	10	13	9	15
Lagrange.....	Total.....	16	17	13	23	16	11	12	13	20	10	13	16
	Male.....	6	7	7	7	9	6	10	6	13	6	9	9
	Female.....	10	10	6	14	8	6	2	7	7	4	4	6
Lake.....	Total.....	54	68	72	68	72	81	78	196	78	75	77	94
	Male.....	36	39	40	38	66	57	51	76	45	50	51	69
	Female.....	18	29	32	30	10	24	27	61	33	25	26	35
Laporte.....	Total.....	65	64	62	55	62	43	46	57	46	51	53	49
	Male.....	31	20	28	33	33	21	32	29	27	34	20	27
	Female.....	34	34	24	22	30	22	14	28	19	17	33	22
Lawrence.....	Total.....	33	40	36	31	37	27	60	42	32	33	29	27
	Male.....	19	25	18	17	15	18	42	23	17	15	14	11
	Female.....	14	15	18	14	22	9	18	19	16	18	15	16
Madison.....	Total.....	75	93	99	68	63	55	72	81	63	66	68	74
	Male.....	46	53	44	34	30	27	35	45	35	39	40	40
	Female.....	30	40	55	34	33	28	37	36	28	27	28	34
Marion.....	Total.....	343	334	343	292	395	398	403	273	292	304	334	331
	Male.....	170	167	181	172	173	170	204	207	196	199	187	193
	Female.....	173	167	162	120	122	128	199	166	126	135	147	138
Marshall.....	Total.....	18	22	20	23	24	25	27	22	18	23	19	28
	Male.....	8	12	10	10	13	15	15	16	13	13	10	13
	Female.....	12	14	18	13	11	10	12	13	10	9	9	15

Martin.....	Total.....	9	11	15	16	12	12	19	16	18	12	15	18
	Male.....	5	4	6	8	3	8	12	7	7	7	9	10
	Female.....	4	7	9	8	9	4	7	9	6	6	6	8
Miami.....	Total.....	46	35	40	23	32	31	27	31	25	22	30	24
	Male.....	29	19	20	12	18	20	12	16	13	10	9	15
	Female.....	17	16	20	11	14	11	15	15	12	12	21	9
Monroe.....	Total.....	27	34	22	20	21	21	30	27	19	16	27	27
	Male.....	13	20	14	7	8	9	19	18	15	8	13	12
	Female.....	14	14	8	13	13	12	11	9	4	8	14	15
Montgomery.....	Total.....	35	45	43	30	28	31	32	38	27	36	23	30
	Male.....	18	27	27	12	22	23	23	20	13	14	13	16
	Female.....	16	18	16	18	16	8	14	18	14	22	10	14
Morgan.....	Total.....	30	31	29	13	19	23	30	33	16	19	21	23
	Male.....	16	16	19	7	8	13	11	21	10	10	9	18
	Female.....	14	15	10	6	11	10	19	12	6	9	12	10
Newton.....	Total.....	5	16	10	9	8	5	6	7	7	5	8	12
	Male.....	2	8	4	5	7	1	1	3	1	3	5	7
	Female.....	3	8	6	4	1	4	5	4	6	2	3	5
Noble.....	Total.....	37	36	28	28	24	29	20	28	17	25	11	19
	Male.....	21	18	12	10	12	15	10	19	8	11	6	11
	Female.....	16	18	16	18	12	14	10	9	9	14	5	12
Ohio.....	Total.....	13	11	7	8	4	5	11	4	3	5	2	8
	Male.....	10	3	3	4	1	2	6	1	2	4	2	5
	Female.....	3	8	4	4	3	3	5	3	1	1	.....	3
Orange.....	Total.....	19	16	27	17	16	22	19	20	15	20	11	18
	Male.....	9	7	13	9	11	15	10	13	8	13	8	18
	Female.....	10	9	14	8	5	7	9	7	7	7	3	10
Owen.....	Total.....	14	13	19	17	12	10	15	21	23	15	10	9
	Male.....	6	6	9	9	7	8	12	11	11	6	5	4
	Female.....	8	7	10	8	5	2	3	13	12	9	5	5
Parks.....	Total.....	26	32	27	21	24	21	16	28	27	34	21	31
	Male.....	16	13	14	11	14	13	11	16	13	20	10	19
	Female.....	10	19	13	10	10	8	5	9	14	14	11	12
Perry.....	Total.....	15	24	25	10	18	16	13	18	10	14	11	22
	Male.....	8	11	16	6	10	7	8	10	3	8	5	13
	Female.....	7	13	9	4	8	9	5	10	7	6	6	9

TABLE No. 3—Continued.

COUNTIES.	Sex.													Oct.	Nov	Dec.
		Jan.	Feb.	Mar	Apr.	May	June.	July.	Aug.	Sept.						
Pike.....	Total.....	22	22	19	28	24	16	41	24	15	21	25	14			
	Male.....	10	12	8	11	7	9	17	6	5	8	12	6			
	Female.....	12	10	11	17	17	7	24	18	10	13	13	8			
Porter.....	Total.....	20	24	23	16	14	17	18	15	24	22	22	24			
	Male.....	12	12	10	8	8	9	10	6	13	8	13	15			
	Female.....	8	12	13	8	6	8	8	9	11	14	9	9			
Posey.....	Total.....	18	32	41	25	32	17	32	32	15	16	23	23			
	Male.....	8	19	26	10	19	11	16	15	10	12	19	14			
	Female.....	10	13	15	15	13	6	16	17	5	4	4	9			
Pulaski.....	Total.....	21	19	17	17	11	9	8	12	8	15	17	9			
	Male.....	10	11	7	7	3	5	3	4	4	5	11	2			
	Female.....	11	8	10	10	8	4	5	8	3	4	9	7			
Putnam.....	Total.....	24	35	26	23	30	18	28	32	38	27	24	23			
	Male.....	15	14	10	13	20	12	14	17	23	14	13	9			
	Female.....	9	21	16	10	10	6	14	15	15	13	11	14			
Randolph.....	Total.....	27	37	33	31	24	21	30	31	25	26	24	22			
	Male.....	11	20	14	13	15	8	13	16	9	16	15	10			
	Female.....	16	17	19	18	9	13	17	15	16	10	9	12			
Ripley.....	Total.....	13	27	34	27	17	20	23	9	17	12	21	21			
	Male.....	9	16	20	16	9	8	12	7	6	5	14	13			
	Female.....	4	11	14	11	8	13	11	2	11	7	7	8			
Rush.....	Total.....	22	33	24	24	15	15	23	24	21	18	20	15			
	Male.....	8	14	16	9	3	7	11	12	7	9	15	8			
	Female.....	14	19	8	15	12	8	12	12	14	9	5	7			
Scott.....	Total.....	14	12	6	8	5	5	10	7	16	7	6	8			
	Male.....	4	6	4	5	4	3	5	4	7	4	2	2			
	Female.....	10	6	2	3	1	2	5	3	9	3	3	6			

Shelby.....	Total.....	33	42	37	36	35	23	31	33	29	24	30
Male.....	13	14	22	15	15	16	13	15	16	14	14	17
Female.....	20	28	15	21	19	10	10	16	17	15	13	13
Spencer.....	Total.....	20	18	23	16	12	20	18	16	12	19	23
Male.....	11	8	10	7	5	15	15	7	5	6	12	12
Female.....	9	10	13	9	7	5	5	11	11	6	7	11
Stark.....	Total.....	11	13	11	16	10	12	9	11	9	9	10
Male.....	8	7	3	8	7	7	7	4	5	3	3	5
Female.....	3	6	8	8	3	3	5	5	6	6	6	5
Steuben.....	Total.....	19	18	12	21	11	17	13	14	18	18	9
Male.....	7	9	7	9	5	9	8	5	10	14	12	4
Female.....	12	9	5	12	6	6	9	8	4	4	6	5
St. Joseph.....	Total.....	99	87	82	74	103	69	120	85	66	102	99
Male.....	55	47	49	31	55	33	33	58	43	33	35	54
Female.....	43	40	33	43	47	36	36	62	44	33	44	45
Sullivan.....	Total.....	38	46	33	38	14	28	52	38	42	27	27
Male.....	19	23	13	20	9	18	18	34	19	25	15	15
Female.....	19	23	18	18	5	10	10	22	17	17	12	12
Switzerland.....	Total.....	11	17	8	12	15	16	16	14	13	10	15
Male.....	8	12	5	10	4	7	8	8	5	8	4	9
Female.....	3	5	3	2	11	9	7	8	9	5	6	7
Tippecanoe.....	Total.....	44	52	49	56	38	40	37	44	47	33	49
Male.....	14	32	31	30	19	20	20	20	23	10	18	25
Female.....	30	20	23	26	19	14	14	17	16	28	15	24
Tipton.....	Total.....	23	28	17	27	16	19	18	20	22	20	20
Male.....	9	12	8	15	9	12	12	9	11	16	11	7
Female.....	14	16	9	12	7	7	7	9	9	14	9	13
Union.....	Total.....	7	7	7	6	7	3	9	14	8	1	10
Male.....	4	4	3	3	5	2	2	2	12	4	4	4
Female.....	3	3	4	3	2	1	1	7	2	4	1	6
Vanderburgh.....	Total.....	106	126	93	86	101	120	94	81	88	85	92
Male.....	59	65	42	44	60	61	61	49	37	49	41	51
Female.....	47	61	51	42	41	59	59	45	44	39	44	41
Vermillion.....	Total.....	33	27	25	22	21	26	28	30	15	14	16
Male.....	20	14	11	11	11	14	14	10	15	9	6	10
Female.....	13	13	11	9	10	10	12	18	15	6	8	6

TABLE No. 3—Continued.

COUNTIES.	Sex.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Vigo.....	Total.....	106	107	108	92	105	76	104	130	99	132	93	87
	Male.....	45	42	44	53	45	40	50	49	59	83	46	56
	Female.....	41	45	44	39	47	36	54	61	40	50	47	29
Wabash.....	Total.....	27	33	36	20	32	22	27	32	34	21	26	25
	Male.....	14	15	20	10	17	13	13	15	18	12	14	16
	Female.....	13	18	16	10	15	9	14	14	16	9	11	9
Warren.....	Total.....	12	13	8	11	13	13	6	14	6	10	12	14
	Male.....	7	6	4	4	7	7	4	8	2	5	7	7
	Female.....	5	7	4	7	6	6	2	6	4	5	5	7
Warrick.....	Total.....	24	16	36	23	16	23	29	25	24	22	20	27
	Male.....	14	9	19	9	12	11	17	16	10	13	15	15
	Female.....	10	7	17	14	4	12	12	9	14	9	7	12
Washington.....	Total.....	14	29	18	13	24	12	14	14	20	17	15	27
	Male.....	8	11	7	11	8	7	10	9	10	11	9	9
	Female.....	6	18	11	2	16	5	4	5	10	6	6	18
Wayne.....	Total.....	54	59	70	57	44	41	58	65	68	42	41	52
	Male.....	27	30	41	23	23	22	30	37	34	23	17	21
	Female.....	27	29	29	25	22	19	28	28	34	20	24	31
Wells.....	Total.....	25	22	33	30	23	17	22	35	26	28	14	18
	Male.....	15	13	14	11	11	11	11	19	13	10	9	6
	Female.....	10	9	14	16	12	6	11	16	13	18	5	12
White.....	Total.....	16	11	21	10	10	13	16	11	13	12	12	19
	Male.....	7	5	10	6	4	4	9	9	5	5	8	9
	Female.....	9	6	11	4	6	9	7	6	4	7	4	10

Whitley.....	Total.....	13	20	19	20	12	18	12	21	17	14	
	Male.....	4	15	11	12	8	11	5	7	7	10	8
	Female.....	5	8	8	8	4	7	7	14	3	7	6
Total males.....		1,627	1,717	1,905	1,541	1,535	1,446	1,700	1,753	1,549	1,526	1,432
	Total females.....	1,499	1,686	1,757	1,420	1,379	1,169	1,433	1,623	1,338	1,294	1,239
Grand total.....		3,126	3,413	3,622	2,961	2,914	2,615	3,133	3,376	2,887	2,820	2,671
												2,923

TABLE No. 3—Continued.

Deaths in Indiana by Months, Counties, Ages, Sex, Color, Nationality and Conjugal Condition, 1907.

COUNTIES:	Sex.	0	1	2	3	4	5	10	15	20	25	30	35	40	45	50	55	60	65
Adams...	Total...	56	4	1	1	1	1	3	15	7	8	7	7	8	8	9	10	10	11
	Male...	28	2	1	1	1	1	2	8	4	3	1	1	2	3	7	8	8	9
	Female...	28	2	...	...	...	...	1	7	3	5	6	6	6	5	2	2	2	2
Allen...	Total...	199	27	15	6	5	25	25	35	52	48	44	45	46	48	42	54	64	83
	Male...	120	15	9	1	5	15	16	21	32	19	19	23	20	27	24	31	40	48
	Female...	79	12	6	5	...	10	9	14	24	29	21	23	26	21	18	23	24	35
Bartholomew...	Total...	79	7	4	4	1	7	3	11	13	14	12	9	13	9	16	23	20	38
	Male...	40	4	3	2	1	1	2	5	6	6	5	4	8	6	8	11	10	20
	Female...	39	3	1	2	...	6	1	6	7	8	7	5	5	4	8	12	10	18
Benton...	Total...	36	8	3	6	...	...	4	1	4	4	6	6	3	4	7	8	5	9
	Male...	21	4	...	3	...	...	1	...	3	2	3	3	2	2	5	5	3	5
	Female...	15	4	3	3	...	...	3	1	1	2	3	2	...	2	2	3	2	4
Blackford...	Total...	55	7	5	5	1	...	6	6	6	6	10	4	10	8	8	9	13	16
	Male...	30	3	3	3	1	...	5	3	...	4	4	1	4	4	6	6	8	11
	Female...	25	5	2	2	...	...	1	3	6	2	6	3	6	4	2	3	5	5
Boone...	Total...	72	9	3	3	2	9	5	6	12	8	9	8	8	8	10	16	23	22
	Male...	42	6	2	2	1	5	2	3	8	7	5	5	3	2	4	9	13	12
	Female...	30	3	1	1	...	4	3	4	0	1	4	4	6	6	6	7	9	10
Brown...	Total...	33	4	1	2	2	2	7	3	7	2	3	2	3	1	3	4	8	18
	Male...	19	2	1	...	...	...	3	3	3	1	1	1	1	...	1	2	3	9
	Female...	14	2	...	2	...	...	4	...	4	1	2	...	2	...	2	2	5	9
Carroll...	Total...	46	5	3	1	...	2	3	3	6	5	3	3	6	11	9	6	17	13
	Male...	27	4	3	1	...	...	1	2	1	2	3	3	4	4	3	1	16	11
	Female...	19	1	...	...	...	...	2	1	5	3	...	...	2	7	6	5	1	2

Case	83	10	12	4	4	9	5	11	28	16	17	17	20	16	32	37	28	23
Total	50	6	5	3	2	4	4	9	16	5	10	9	15	9	16	21	18	11
Male	33	4	7	1	2	5	1	2	12	11	7	8	5	9	16	16	10	
Female																		
Clark	92	19	6	7	4	4	5	19	22	28	17	19	16	19	17	23	24	29
Total	56	6		5	1	4	3	8	8	3	11	11	10	5	10	12	15	17
Male	36	13	6	2	3	4	2	11	14	5	6	8	6	6	7	11	9	12
Female																		
Clay	90	28	15	3	3	14	7	6	20	12	10	19	8	23	16	21	21	29
Total	53	13	9	2	1	11	4	6	4	4	10	10	2	13	12	14	15	23
Male	37	15	6	1	3	3	3	14	8	8	6	9	6	10	4	7	6	6
Female																		
Clinton	66	14	5	4	2	3	10	10	23	10	14	17	6	18	14	17	23	30
Total	37	9	2	2	2	2	3	5	11	5	7	11	2	9	6	9	18	18
Male	29	5	3	2	1	1	7	5	12	5	6	6	4	9	8	8	14	12
Female																		
Crawford	18	5	4	2	2	5	1	8	11	10	6	6	5	5	7	6	12	19
Total	17	4	2	2	1	4	1	2	6	2	2	3	1	3	3	2	7	12
Male	11	1	2	1	1	1	1	6	5	8	4	3	4	2	4	4	5	7
Female																		
Davies	100	20	7	4	3	8	7	12	19	17	10	16	9	7	7	11	19	27
Total	37	11	4	3	3	3	7	7	10	3	1	10	3	5	5	7	17	17
Male	43	9	3	1	5	5	5	5	9	14	9	10	6	2	2	4	11	10
Female																		
Dearborn	54	9	6	3	2	11	7	12	11	9	7	5	9	8	12	14	14	16
Total	20	3	2	1	2	6	4	7	4	4	2	2	5	3	6	7	8	8
Male	34	6	4	2	2	6	3	7	4	5	5	2	4	5	6	7	7	
Female																		
Deatur	64	8	2	3	1	6	3	3	4	2	8	11	7	4	12	12	21	23
Total	25	6	2	3	1	5	2	2	2	1	2	6	4	4	8	7	19	15
Male	39	2	2	1	1	3	2	3	2	1	2	6	3	3	4	5	12	8
Female																		
Detailb.	41	8	5	1	1	5	5	7	13	8	14	6	6	17	15	10	18	24
Total	23	5	2	2	1	2	4	6	6	6	7	4	3	10	7	8	15	15
Male	18	3	3	1	1	2	4	4	7	9	7	2	3	7	8	5	12	9
Female																		
Delaware	172	41	17	9	3	13	16	24	20	34	27	27	15	23	30	22	36	26
Total	101	23	11	5	1	9	7	10	18	18	15	10	7	11	15	12	16	19
Male	71	18	6	4	2	7	9	14	10	16	12	17	8	12	15	10	20	7
Female																		
Dubois	53	14	3	2	4	2	3	3	15	4	12	9	9	9	6	7	10	14
Total	32	8	3	1	2	2	2	2	4	3	7	5	7	2	2	6	6	4
Male	21	6	3	1	2	2	2	2	1	1	5	4	2	3	4	1	4	10
Female																		
Filthart	116	13	7	4	4	13	11	13	26	25	26	20	13	33	23	35	35	49
Total	63	5	1	1	2	6	4	6	8	12	12	5	6	14	10	19	10	22
Male	53	8	6	4	4	7	7	7	18	13	14	7	7	18	13	16	16	27
Female																		

TABLE No. 3—Continued.

COUNTIES. 1913	Sex.	0	1	2	3	4	5 to 10	10 to 15	15 to 20	20 to 25	25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 65	65 to 70
Fayette	Total.	43	2	2	2	1	.....	1	2	3	3	8	3	8	6	12	9	14	17
	Male.	27	2	2	2	1	.....	1	1	3	2	4	3	5	6	3	3	6	11
	Female.	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6
Floyd	Total.	83	15	5	1	4	10	7	15	17	23	11	19	14	15	22	20	19	46
	Male.	43	3	4	1	2	7	4	6	8	12	4	9	3	8	12	10	10	24
	Female.	40	12	1	.....	3	3	3	9	9	11	7	10	11	7	10	9	9	22
Fountain	Total.	57	2	2	3	2	5	7	7	7	10	12	9	7	13	15	12	14	16
	Male.	30	.....	1	2	2	1	4	3	3	1	4	4	3	8	8	10	9	8
	Female.	27	2	1	1	.....	4	3	4	4	9	8	5	4	5	7	2	5	8
Franklin	Total.	46	3	1	2	1	1	1	1	9	7	9	4	3	7	5	13	6	18
	Male.	34	3	1	.....	.....	.....	.....	.....	6	4	3	2	1	5	4	6	3	9
	Female.	12	.....	.....	2	1	1	1	1	3	3	6	2	2	2	1	7	3	9
Fulton	Total.	42	6	2	2	.....	1	1	6	4	6	4	5	4	8	9	8	13	11
	Male.	30	5	1	1	.....	.....	1	3	2	5	2	1	1	4	3	5	8	8
	Female.	12	.....	.....	1	.....	1	1	3	2	1	2	4	3	4	6	3	5	3
Gibson	Total.	86	17	9	4	2	7	8	12	17	22	12	13	13	14	16	19	15	22
	Male.	45	7	4	2	1	4	4	8	13	17	13	14	13	14	11	13	13	19
	Female.	41	10	5	2	1	3	4	9	10	11	8	8	5	6	5	6	2	12
Grant	Total.	165	25	11	8	5	20	13	21	24	24	33	22	24	31	25	37	65	83
	Male.	93	16	4	4	2	12	7	13	13	10	14	14	13	22	11	21	39	65
	Female.	72	9	7	4	3	8	6	12	13	14	9	9	12	9	14	16	26	18
Greene	Total.	127	24	14	8	4	10	10	23	20	22	24	11	17	15	14	13	25	15
	Male.	60	12	4	6	2	6	3	10	9	11	10	3	8	7	9	8	15	8
	Female.	58	12	10	2	2	4	7	13	11	11	14	8	9	8	5	5	10	7
Hamilton	Total.	77	8	4	3	1	4	7	10	13	9	4	3	9	9	11	24	26	41
	Male.	44	5	3	2	1	1	5	6	6	3	2	2	6	6	5	16	15	22
	Female.	33	.....	.....	1	.....	3	6	5	7	6	2	1	3	3	6	8	10	19

Hancock.....	Total.....	68	11	5	2	2	8	5	8	10	12	11	8	14	7	6	10	26	22
	Male.....	36	6	2	2	2	3	3	3	3	4	5	2	8	6	4	3	9	13
Harrison.....	Total.....	60	11	6	3	1	3	10	6	11	5	7	4	6	4	7	16	16	12
	Male.....	37	9	3	1	1	2	7	2	2	3	1	2	2	2	4	4	8	6
Hendricks.....	Total.....	52	3	2	1	2	5	10	9	10	10	6	8	5	10	14	18	21	22
	Male.....	28	3	2	1	1	3	7	3	5	6	4	2	3	5	5	11	12	10
Henry.....	Total.....	82	14	4	4	1	3	5	14	15	17	15	4	8	9	26	16	26	19
	Male.....	45	6	2	3	1	2	3	8	12	13	8	7	6	3	16	5	12	9
Howard.....	Total.....	115	5	5	4	5	12	8	17	10	17	11	11	8	14	7	22	21	23
	Male.....	57	3	3	3	2	5	5	7	5	4	4	6	3	10	3	13	13	12
Huntington.....	Total.....	70	5	6	5	3	4	4	10	12	9	8	12	5	16	15	17	20	23
	Male.....	38	3	2	3	2	2	2	2	4	6	5	7	3	8	9	9	8	14
Jackson.....	Total.....	88	21	5	6	3	9	8	15	15	15	16	9	5	13	8	17	19	28
	Male.....	40	7	2	3	3	3	5	7	8	7	10	6	3	9	3	12	11	17
Jasper.....	Total.....	44	9	3	3	3	6	6	3	5	7	.....	2	5	8	5	9	8	8
	Male.....	29	.....	2	2	2	3	3	.....	3	5	.....	.....	3	3	2	7	5	4
Jay.....	Total.....	72	19	2	3	4	7	8	14	16	9	8	19	10	7	11	17	15	28
	Male.....	34	16	2	2	2	2	4	6	9	7	5	15	8	6	4	12	8	12
Jefferson.....	Total.....	45	11	5	3	2	5	5	5	15	13	7	8	16	19	19	17	25	24
	Male.....	29	4	3	1	1	2	2	2	12	1	3	3	5	8	11	10	14	14
Jennings.....	Total.....	40	8	2	5	1	1	3	3	13	4	7	10	10	10	5	10	9	12
	Male.....	16	3	2	1	1	1	2	3	4	3	2	6	4	8	2	4	3	7
Johnson.....	Total.....	40	6	3	1	4	2	5	8	13	11	12	14	11	18	14	6	18	28
	Male.....	22	5	2	2	2	2	3	7	8	5	6	9	4	12	9	4	8	14
	Total.....	18	1	.....	1	2	2	3	1	5	6	6	5	7	6	5	2	10	14
	Female.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

TABLE No. 3—Continued.

COUNTIES.	Sex.	to																		
		0	1	2	3	4	5	10	15	20	25	30	35	40	45	50	55	60	65	70
Knox.....	Total.....	114	26	10	3	2	8	12	13	14	26	27	19	26	21	11	19	28	27	
	Male.....	64	15	5	2	2	1	6	5	9	12	14	12	15	12	6	13	14	17	
	Female.....	50	11	5	1	2	7	6	8	5	14	13	7	11	9	5	6	14	10	
Kosciusko.....	Total.....	55	11	4	2	1	7	5	10	16	8	9	10	5	13	10	19	22	25	
	Male.....	31	5	1	1	1	3	7	3	3	5	1	1	1	5	5	13	12	11	
	Female.....	24	6	3	1	1	6	2	3	13	3	8	9	4	8	5	6	10	14	
Lagrange.....	Total.....	28	3	3	1	4	3	3	2	3	3	7	5	4	5	7	11	11	12	
	Male.....	19	1	1	1	1	2	1	1	2	1	5	2	3	3	3	6	7	5	
	Female.....	9	2	2	1	3	1	2	1	1	2	2	2	3	2	4	5	4	7	
Lake.....	Total.....	287	59	23	12	6	21	10	27	52	52	50	54	44	34	34	25	28	35	
	Male.....	161	34	6	8	3	15	6	19	39	40	29	41	38	26	27	16	16	19	
	Female.....	126	25	17	4	3	6	4	8	13	12	21	13	6	8	7	9	12	16	
Laporte.....	Total.....	114	22	7	12	5	9	12	19	26	18	18	18	26	38	22	24	34	41	
	Male.....	59	10	3	7	3	4	4	11	14	8	12	15	14	23	11	9	24	21	
	Female.....	55	12	4	5	2	5	8	8	12	10	6	3	12	15	11	15	10	20	
Lawrence.....	Total.....	108	23	13	2	3	13	10	16	25	21	19	16	7	23	14	21	21	19	
	Male.....	68	12	8	3	3	6	10	10	10	7	8	7	6	13	10	14	13	7	
	Female.....	40	11	5	2	3	10	4	6	15	14	11	9	1	10	4	7	8	12	
Madison.....	Total.....	195	29	17	5	8	20	15	30	39	32	41	28	27	28	48	36	43	50	
	Male.....	110	14	8	3	3	10	9	10	16	15	13	16	16	11	31	17	28	30	
	Female.....	85	15	9	2	5	10	6	20	23	17	28	12	11	17	17	19	15	20	
Marion.....	Total.....	824	110	35	27	20	78	54	121	183	202	206	231	186	184	210	180	207	243	
	Male.....	478	64	16	14	12	35	29	55	92	99	104	133	95	115	126	104	102	137	
	Female.....	346	46	19	13	8	43	25	66	91	103	102	98	91	69	84	76	105	106	
Marshall.....	Total.....	68	8	6	3	2	2	4	8	10	7	4	5	6	10	10	14	27	25	
	Male.....	31	5	3	2	1	1	3	4	2	3	2	2	3	5	6	6	15	12	
	Female.....	27	3	3	1	1	1	1	4	8	4	2	3	3	5	4	8	12	13	

Martin.....	Total.....	40	7	1	1	1	1	1	5	2	2	5	9	3	7	5	3	4	13	7	13	8
	Male.....	24	5	1	1	1	1	1	3	2	2	3	3	3	2	3	3	1	6	1	12	7
Miami.....	Total.....	62	10	2	3	2	2	2	3	1	5	12	18	17	11	8	14	19	22	18	35	19
	Male.....	42	6	2	3	2	2	2	1	4	1	6	16	17	3	3	5	10	12	11	15	11
Monroe.....	Total.....	58	8	9	6	1	11	8	3	3	3	11	16	21	2	12	6	7	8	12	21	15
	Male.....	36	3	7	4	1	3	3	2	2	2	6	11	6	1	7	4	3	4	7	12	11
Montgomery.....	Total.....	22	3	2	2	1	3	3	3	3	3	10	10	10	1	5	2	4	4	5	9	4
	Male.....	14	2	2	1	1	1	1	1	1	1	4	9	15	20	13	7	9	13	25	28	35
Morgan.....	Total.....	67	9	3	1	1	11	4	2	2	3	9	12	20	13	15	7	6	6	11	24	24
	Male.....	41	7	1	1	1	4	2	2	2	3	3	12	12	7	13	1	3	7	11	10	11
Morgan.....	Total.....	63	11	2	2	1	6	2	1	1	2	9	12	5	10	8	6	6	13	12	22	23
	Male.....	36	7	1	1	1	4	1	1	1	1	3	5	3	5	3	4	4	7	10	11	9
Newton.....	Total.....	16	3	2	2	1	4	2	3	1	2	3	3	3	1	4	4	5	1	3	13	7
	Male.....	11	1	1	1	1	2	1	2	1	1	1	2	1	1	2	2	3	1	3	4	5
Noble.....	Total.....	56	6	2	5	1	5	2	3	3	3	5	10	9	8	4	6	9	12	14	25	28
	Male.....	29	3	2	1	1	4	2	3	3	2	3	6	3	5	2	5	4	6	9	15	12
Ohio.....	Total.....	27	3	2	4	2	4	2	2	2	2	3	4	6	3	2	5	5	6	5	10	16
	Male.....	6	2	2	1	2	1	1	1	1	1	2	4	1	1	1	3	3	3	3	8	9
Orange.....	Total.....	4	2	2	2	1	1	1	1	1	1	2	1	1	1	1	1	2	2	1	3	3
	Male.....	2	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	1	3	3
Orange.....	Total.....	38	8	5	1	1	3	3	3	3	3	11	13	8	9	21	7	9	12	4	8	16
	Male.....	27	6	3	1	1	2	2	2	2	2	6	9	4	4	7	6	5	7	2	3	8
Owen.....	Total.....	11	2	3	1	1	2	2	2	2	2	5	4	4	5	14	1	4	5	2	5	8
	Male.....	6	1	1	1	1	1	1	1	1	1	3	3	2	2	3	4	4	4	3	5	8
Parks.....	Total.....	32	6	1	1	1	2	2	2	2	2	7	9	4	6	3	4	10	5	7	11	14
	Male.....	15	4	1	1	1	1	1	1	1	1	4	3	2	1	2	1	4	4	4	6	10
Perry.....	Total.....	17	2	2	1	1	2	2	2	2	2	3	6	3	5	8	11	11	13	16	16	23
	Male.....	9	5	2	1	2	1	1	1	1	1	13	12	12	5	8	11	11	13	16	11	16
Perry.....	Total.....	29	5	3	6	5	6	6	6	6	6	18	11	8	3	5	7	6	6	11	16	17
	Male.....	15	3	2	3	2	3	3	3	3	3	5	11	4	3	5	4	6	6	5	6	7
Perry.....	Total.....	33	8	1	6	6	6	7	7	7	7	6	13	7	3	10	3	6	9	5	7	15
	Male.....	18	4	1	2	2	4	4	4	4	4	2	9	4	1	7	1	3	6	3	4	5
Perry.....	Total.....	15	4	4	4	4	4	4	4	4	4	6	9	4	3	9	3	3	3	3	3	10
	Female.....	15	4	4	4	4	4	4	4	4	4	6	9	4	3	9	3	3	3	3	3	10

TABLE No. 3—Continued.

COUNTRIES.	Sax.	0	1	2	3	4	5 to 10	10 to 15	15 to 20	20 to 25	25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 65	65 to 70
Pike.....	Total.....	65	13	8	.....	5	8	4	10	13	12	10	9	8	11	12	15	10	11
	Male.....	33	9	3	.....	2	3	1	3	7	6	3	3	2	2	3	3	8	5
	Female.....	32	4	5	.....	3	5	3	7	6	6	7	6	9	9	9	12	2	6
Porter.....	Total.....	42	4	3	2	1	3	6	6	7	3	11	6	15	6	8	10	15	15
	Male.....	24	2	.....	2	.....	1	2	2	7	1	5	4	5	4	6	4	8	8
	Female.....	18	2	3	.....	1	2	4	4	.....	2	6	2	10	2	2	6	7	7
Poway.....	Total.....	55	15	4	7	2	.....	6	10	19	9	11	15	11	16	16	11	12	23
	Male.....	36	6	3	5	1	.....	1	5	9	4	4	10	5	8	11	8	7	11
	Female.....	19	9	1	2	1	.....	5	5	10	5	7	5	6	8	5	3	5	12
Pulaski.....	Total.....	45	5	3	1	.....	4	3	2	3	4	3	8	2	7	5	7	5	12
	Male.....	23	2	1	.....	.....	2	2	2	.....	3	3	5	3	3	3	3	1	6
	Female.....	22	3	2	1	.....	2	1	.....	3	1	.....	3	4	4	4	4	4	6
Putnam.....	Total.....	60	10	3	.....	1	3	6	7	14	10	12	13	8	12	13	18	19	23
	Male.....	34	7	1	.....	1	2	3	2	9	5	4	6	4	5	5	7	10	15
	Female.....	26	3	2	.....	.....	1	3	5	5	5	8	7	4	7	8	11	9	8
Randolph.....	Total.....	67	15	7	3	2	7	6	10	9	19	5	4	3	11	17	17	21	19
	Male.....	35	1	5	2	1	3	2	4	5	5	3	1	1	6	6	7	11	8
	Female.....	32	5	2	1	1	4	4	6	4	14	2	3	2	5	11	10	10	11
Ripley.....	Total.....	33	5	3	.....	.....	4	6	8	9	7	10	8	4	7	10	13	12	20
	Male.....	20	3	2	.....	.....	2	1	4	2	2	3	4	3	3	5	6	8	12
	Female.....	12	2	1	.....	.....	2	5	4	7	5	7	4	1	4	5	7	4	8
Rush.....	Total.....	41	5	2	1	.....	6	1	5	8	9	7	8	16	6	10	14	14	24
	Male.....	21	3	1	.....	.....	3	3	3	3	1	3	3	5	5	5	7	8	11
	Female.....	20	2	1	1	.....	3	1	2	5	8	4	5	11	1	5	7	6	13
Scott.....	Total.....	27	3	3	.....	1	1	1	2	1	3	5	6	2	2	3	4	9	8
	Male.....	19	.....	3	.....	1	1	1	.....	.....	1	.....	3	.....	2	1	2	6	5
	Female.....	8	3	.....	.....	.....	.....	.....	2	1	2	5	3	.....	2	2	2	3	3

Shelby	Total.....	71	10	4	.....	2	3	10	17	17	11	14	13	12	16	13	21	18	30
	Male.....	37	4	3	.....	1	1	5	10	7	6	11	6	10	5	8	13	9	17
	Female.....	34	6	.....	.....	1	.....	5	7	10	5	3	5	11	11	5	8	9	13
Spencer	Total.....	47	9	3	3	.....	5	3	6	7	5	7	4	3	9	9	6	17	14
	Male.....	27	4	.....	3	.....	3	2	4	2	3	3	1	1	3	6	6	6	7
	Female.....	20	5	.....	.....	.....	3	1	2	5	3	4	3	2	6	3	4	11	7
Stark	Total.....	33	3	2	2	2	2	2	5	5	5	6	4	2	4	7	6	6	13
	Male.....	16	2	1	2	.....	1	1	3	3	.....	4	2	2	3	3	3	2	8
	Female.....	17	1	1	.....	2	1	1	2	2	5	4	2	.....	2	4	3	4	5
Steuben	Total.....	28	4	4	2	1	1	3	3	6	6	1	3	6	4	6	12	15	10
	Male.....	14	4	1	.....	.....	.....	3	2	3	3	1	.....	3	2	3	5	8	8
	Female.....	14	.....	3	2	1	1	.....	1	3	3	.....	3	3	2	3	7	7	2
St. Joseph	Total.....	304	40	17	12	8	24	14	29	58	45	37	34	40	55	47	37	54	73
	Male.....	161	17	9	8	2	10	5	14	29	19	16	18	24	39	31	20	30	36
	Female.....	143	23	8	4	6	14	9	15	29	26	11	16	16	26	16	17	24	37
Sullivan	Total.....	119	26	11	6	1	10	5	11	22	13	15	17	8	14	10	23	17	16
	Male.....	63	17	8	4	1	4	3	4	13	5	7	9	5	10	3	12	8	6
	Female.....	56	9	3	2	.....	6	2	7	9	8	8	8	3	4	7	11	9	10
Switzerland	Total.....	33	7	3	2	.....	1	3	3	3	4	4	2	4	4	7	5	14	9
	Male.....	21	4	2	1	.....	1	3	1	3	4	2	1	1	.....	4	2	7	5
	Female.....	12	3	1	.....	.....	.....	.....	2	.....	.....	2	1	3	4	3	3	7	4
Tippacanoe	Total.....	76	6	6	3	2	8	10	16	16	15	15	18	7	31	22	26	39	57
	Male.....	63	4	3	1	1	2	5	9	9	7	7	11	6	13	11	12	23	25
	Female.....	23	2	3	2	1	6	5	7	7	8	8	7	1	18	11	14	16	32
Tipton	Total.....	43	9	1	3	3	9	4	6	12	8	4	9	9	8	8	11	11	17
	Male.....	23	5	.....	1	3	4	2	3	6	1	2	4	4	5	5	6	6	9
	Female.....	20	4	1	2	.....	5	2	3	6	7	2	5	5	3	3	5	5	8
Union	Total.....	11	2	.....	3	1	1	1	4	2	2	3	2	1	2	1	5	5	10
	Male.....	7	2	.....	1	1	1	1	.....	1	2	2	1	1	1	.....	4	2	7
	Female.....	4	.....	.....	.....	.....	.....	.....	4	.....	.....	1	2	.....	1	1	1	3	3
Vanderburgh	Total.....	244	37	16	6	4	24	21	42	56	46	52	63	63	76	64	51	50	61
	Male.....	141	19	5	1	.....	14	14	17	33	20	24	33	28	43	28	23	23	31
	Female.....	103	18	11	5	4	10	7	25	24	26	28	30	34	34	36	28	27	30
Vermillion	Total.....	93	16	6	5	3	7	4	4	13	9	10	7	4	4	4	4	10	13
	Male.....	52	5	2	4	2	4	1	2	7	6	6	4	1	1	2	2	4	8
	Female.....	41	11	4	1	1	3	3	2	4	3	4	3	3	3	2	2	6	5

TABLE No. 3—Continued.

COUNTIES.	Sex.	0	1	2	3	4	5	10	15	20	25	30	35	40	45	50	55	60	65	70
Vago....	Total.....	265	59	21	9	7	24	17	38	73	45	64	68	41	63	70	54	65	67	
	Male.....	152	35	10	5	3	14	13	25	38	23	37	43	28	41	47	26	29	43	
	Female.....	113	24	11	4	4	10	4	11	35	22	27	26	13	22	23	28	36	24	
Wabash....	Total.....	64	8	4	1	.....	3	4	11	13	11	12	7	11	9	9	14	21	27	
	Male.....	22	4	2	1	.....	.....	3	7	6	6	4	4	7	3	3	6	13	15	
	Female.....	22	4	2	.....	.....	3	1	4	7	5	8	3	4	6	3	1	9	12	
Warren....	Total.....	21	4	3	2	1	2	1	5	3	4	4	7	9	5	5	2	5	8	
	Male.....	11	2	1	1	1	1	.....	3	2	2	2	2	3	3	2	1	2	2	
	Female.....	10	2	3	1	.....	1	1	2	1	2	2	5	6	3	3	1	3	6	
Warrick....	Total.....	70	19	6	4	3	10	4	7	11	12	12	7	8	8	8	11	13	13	
	Male.....	45	6	3	2	1	5	1	3	6	4	4	4	4	5	3	3	8	9	
	Female.....	25	13	3	2	2	5	3	4	5	8	8	5	4	3	5	8	4	4	
Washington..	Total.....	44	2	5	2	3	13	5	8	6	7	8	6	6	3	5	5	12	13	
	Male.....	21	1	2	1	1	9	4	5	2	3	5	2	3	3	3	2	7	7	
	Female.....	23	1	3	2	2	4	1	3	3	4	3	4	3	.....	2	3	5	6	
Wayne....	Total.....	105	9	5	2	2	10	8	16	27	20	25	31	27	30	31	40	34	51	
	Male.....	57	5	2	2	1	4	5	8	15	11	10	13	13	14	19	22	18	22	
	Female.....	48	4	3	.....	1	6	3	8	12	9	15	18	14	16	12	18	16	29	
Wells....	Total.....	76	9	2	6	3	8	3	9	6	8	6	9	12	10	6	15	21	21	
	Male.....	36	5	1	4	2	2	1	5	2	5	2	2	7	5	3	9	8	15	
	Female.....	41	4	1	2	1	6	2	4	5	3	4	6	5	5	3	6	13	6	
White....	Total.....	23	3	3	1	.....	5	2	4	6	1	5	4	5	11	6	13	7	13	
	Male.....	14	1	1	.....	.....	2	1	4	3	1	5	2	2	5	1	8	5	7	
	Female.....	9	2	2	1	.....	3	1	.....	3	.....	3	2	3	6	5	5	2	6	

Whites	Total	42	1	2	1	2	3	4	8	3	5	6	2	8	9	6	12	17
	Male	25	1	1	1	2	2	1	4	4	3	1	1	1	7	4	5	7
	Female	17				2	1	3			4			2	2	2	7	10
Total males		4,279	643	245	170	343	312	512	736	639	610	688	609	772	830	895	1,061	1,357
Total females		3,320	575	290	153	360	289	555	808	721	706	659	560	665	661	731	950	1,077
Grand total		7,599		535	325	703	601	1,067	1,544	1,360	1,316	1,347	1,169	1,437	1,491	1,626	2,031	2,434

TABLE No. 3—Continued.

Deaths in Indiana by Months, Counties, Ages, Sex, Color, Nationality and Conjugal Condition, 1907.

COUNTIES.	Sex.		70 to 75		76 to 80		80 to 90		90 and over.	Unknown.	White.	Colored.	American.	Foreign.	Not Reported.	Single.	Married.	Widowed.	Not Reported.	Total.
	Total.	Female.	70	75	76	80	80	90												
Adams.	Total.	22	20	19	19	19	19	19	2	230	.....	.....	200	20	1	92	97	80	2	230
	Male.	11	11	11	11	11	11	11	1	112	.....	.....	97	15	.....	47	47	16	2	112
Allen.	Female.	11	9	8	8	8	8	8	1	118	.....	.....	103	14	1	45	50	23	.....	118
	Total.	84	76	87	87	87	87	87	15	1,114	14	864	249	15	.....	402	418	240	8	1,128
Bartholomew.	Male.	45	38	36	36	36	36	36	8	608	5	469	123	11	.....	283	240	83	8	613
	Female.	39	38	51	51	51	51	51	7	506	9	395	116	4	.....	180	178	157	.....	515
Benton.	Total.	21	24	24	24	24	24	24	2	356	8	344	16	4	.....	147	137	79	1	364
	Male.	13	14	10	10	10	10	10	1	178	3	173	7	1	.....	77	72	32	.....	181
Blackford.	Female.	8	10	9	9	9	9	9	3	147	5	171	9	3	.....	70	65	47	1	183
	Total.	3	5	2	2	2	2	2	3	83	.....	.....	129	14	4	68	51	23	5	147
Boone.	Male.	5	5	2	2	2	2	2	3	64	.....	.....	69	19	4	38	28	12	5	83
	Female.	15	14	14	14	14	14	14	2	219	1	205	15	.....	.....	93	85	42	.....	220
Boone.	Total.	9	7	9	9	9	9	9	1	118	1	108	11	.....	.....	23	51	15	.....	119
	Male.	6	7	5	5	5	5	5	1	101	.....	.....	97	4	.....	40	34	27	.....	101
Brown.	Female.	22	34	33	33	33	33	33	6	322	7	321	6	2	.....	130	119	79	1	329
	Total.	11	17	17	17	17	17	17	4	163	5	164	3	1	.....	71	64	33	.....	168
Carroll.	Male.	11	16	16	16	16	16	16	2	156	2	157	3	1	.....	59	55	46	1	161
	Female.	8	5	12	12	12	12	12	4	127	.....	136	1	.....	.....	63	50	23	1	137
Carroll.	Total.	4	2	5	5	5	5	5	1	68	.....	67	.....	.....	.....	36	34	8	.....	66
	Male.	4	2	7	7	7	7	7	3	69	.....	69	.....	.....	.....	27	26	15	1	66
Carroll.	Female.	23	18	26	26	26	26	26	4	290	.....	290	11	.....	.....	83	91	47	.....	290
	Total.	9	9	14	14	14	14	14	1	114	.....	106	5	.....	.....	50	49	15	.....	114
Carroll.	Male.	14	9	12	12	12	12	12	3	106	.....	100	6	.....	.....	23	42	33	.....	106
	Female.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Cum.	48	34	23	6	3	494	2	431	53	12	189	187	105	15	496
Male	28	17	21	2	1	280	1	240	36	5	120	103	47	11	281
Female	20	17	12	4	2	214	1	191	17	7	69	84	58	4	215
Clark.	27	30	31	2	2	387	60	425	34	7	213	165	83	5	466
Male	11	22	11	2	1	221	31	226	21	5	119	93	36	4	252
Female	16	8	20	...	1	176	38	199	13	2	94	72	47	1	214
Clay	25	27	21	3	4	430	5	370	55	10	196	160	72	7	435
Male	16	12	17	...	3	246	3	202	37	8	116	97	30	4	247
Female	9	15	14	3	1	184	4	168	18	2	80	63	42	3	188
Clinton	26	28	33	8	...	377	2	370	6	3	141	140	95	3	379
Male	12	16	17	3	...	194	1	189	4	2	79	75	36	2	195
Female	14	12	16	5	...	183	1	181	2	1	62	65	56	1	184
Crawford	14	6	12	5	1	170	...	161	7	2	66	68	36	...	170
Male	5	4	6	2	...	80	...	75	4	...	35	32	13	...	80
Female	9	2	6	3	1	90	...	86	3	1	31	36	23	...	90
Davies	15	20	20	1	2	356	2	338	18	2	186	116	52	4	398
Male	9	11	10	1	1	188	1	175	13	1	106	67	14	2	189
Female	6	9	10	...	1	168	1	163	5	1	80	49	38	2	169
Dearborn	26	35	44	2	2	311	5	242	67	7	129	118	62	7	316
Male	16	20	24	...	2	149	5	110	37	7	61	66	21	6	154
Female	10	15	20	2	...	162	...	132	30	...	68	52	41	1	162
Deatur	19	29	35	8	2	296	1	260	23	4	114	106	66	1	28
Male	9	18	22	4	2	145	1	124	18	4	64	66	25	1	146
Female	10	11	13	4	...	141	...	136	5	...	60	40	41	...	141
Dekalb	35	32	32	7	...	399	1	277	29	4	93	135	79	3	310
Male	23	17	12	6	...	163	1	147	16	1	51	94	27	2	164
Female	12	15	20	1	...	146	...	130	13	3	42	51	52	1	146
Delaware	33	30	43	2	3	640	35	650	21	4	338	233	103	1	675
Male	16	12	21	1	2	334	19	336	14	3	201	117	64	1	353
Female	18	18	21	1	1	306	16	314	7	1	137	116	69	...	322
Dubois	17	24	20	1	3	243	1	187	51	6	104	82	56	2	244
Male	10	15	14	1	3	140	1	109	39	3	63	50	23	1	141
Female	7	9	6	...	...	103	...	78	22	3	42	32	28	1	103
Elkhart	59	53	66	10	1	652	1	587	60	6	228	271	145	9	653
Male	27	26	27	4	1	309	...	287	28	4	113	136	53	7	309
Female	32	27	29	6	...	343	1	310	32	2	115	135	92	2	344

TABLE No. 3—Continued.

COUNTIES.	Sex.	70 to 75	75 to 80	80 to 90	90 and over.	Unknown.	White.	Colored.	American.	Foreign.	Not Reported.	Single.	Married.	Widowed.	Not Reported.	Total.
Fayette.	Total.	18	10	13	2		175	4	156	22	1	63	72	41	3	179
	Male.	11	5	7	1		91	3	80	14		31	43	18	3	94
	Female.	7	5	6			84	1	76	8	1	32	30	23		85
Floyd.	Total.	32	28	36	2		415	39	382	61	1	184	152	118		454
	Male.	13	16	23			207	17	189	34	1	96	96	39		224
	Female.	19	22	13	1		208	22	203	27		88	63	79		230
Fountain.	Total.	25	21	35	3		283	1	274	7	3	104	125	55		284
	Male.	18	11	18	1		148	1	144	4	1	56	74	19		149
	Female.	7	10	17	2		135		130	3	2	48	51	36		135
Franklin.	Total.	22	21	28	3	1	212		177	35		86	67	57	2	212
	Male.	12	10	14	2	1	122		103	19		59	38	25		122
	Female.	10	11	14	1		90		74	16		27	29	32	2	90
Fulton.	Total.	24	22	20	2		200		189	10	1	74	71	53	2	200
	Male.	12	12	13	1		104		97	7		49	47	17	1	104
	Female.	12	9	9	1		96		92	3	1	25	24	36	1	96
Gibson.	Total.	24	27	21	3		356	28	356	22	6	164	147	72	1	384
	Male.	13	13	13			185	15	181	16	3	89	81	29	1	200
	Female.	11	14	8	3		171	13	175	6	3	75	66	43		184
Grant.	Total.	69	62	63	5	2	793	47	775	62	3	369	254	208	9	840
	Male.	53	53	36	4	2	479	32	461	49	1	224	152	128	7	511
	Female.	16	23	22	1		314	15	314	13	2	146	102	80	2	329
Greene.	Total.	22	23	23	3	3	469	1	438	27	5	243	160	62	5	470
	Male.	12	11	12		1	236		215	19	2	131	80	22	3	236
	Female.	10	12	11	3	2	233	1	223	8	3	112	80	40	2	234
Hamilton.	Total.	36	26	30	2		350	7	346	8	3	134	147	70	6	367
	Male.	18	15	8	2		186	3	185	3	1	75	87	22	5	189
	Female.	18	11	22			164	4	161	5	2	59	60	48	1	168

Hancock.....	Total.....	20	22	29	4	3	311	2	299	13	1	133	114	63	3	313
	Male.....	10	11	12	1	2	147	2	142	6	.....	71	54	22	2	149
	Female.....	10	11	17	3	1	164	.....	157	7	.....	62	60	41	1	164
Harrison.....	Total.....	27	17	25	4	1	254	8	237	20	5	115	93	53	1	292
	Male.....	17	5	13	2	1	124	3	112	13	2	64	45	17	1	127
	Female.....	10	12	12	2	.....	130	5	125	7	3	51	48	36	.....	135
Hendricks.....	Total.....	28	26	34	4	3	296	7	292	8	3	104	122	72	5	303
	Male.....	14	15	18	2	3	160	3	155	6	2	53	36	28	4	163
	Female.....	14	11	16	2	.....	136	4	137	2	1	51	52	36	1	140
Henry.....	Total.....	31	22	30	6	1	361	11	361	10	1	160	124	75	3	372
	Male.....	12	12	13	3	.....	174	6	172	7	1	92	64	23	1	180
	Female.....	19	10	17	3	1	187	5	189	3	.....	68	70	52	2	192
Howard.....	Total.....	27	28	34	5	1	394	16	388	17	5	190	140	79	1	410
	Male.....	14	16	17	3	1	201	6	192	11	4	96	80	30	1	207
	Female.....	13	12	17	2	.....	193	10	196	6	1	94	60	49	.....	203
Huntington.....	Total.....	33	35	36	7	1	356	.....	324	27	5	135	143	76	2	356
	Male.....	19	21	18	4	.....	189	.....	171	16	2	73	93	21	2	189
	Female.....	14	14	18	3	1	167	.....	153	11	3	62	50	55	.....	167
Jackson.....	Total.....	27	19	27	5	1	375	4	336	39	4	190	118	71	.....	379
	Male.....	14	8	14	1	.....	186	3	164	23	2	93	72	24	.....	189
	Female.....	13	11	13	4	1	189	1	172	16	2	97	46	47	.....	190
Jasper.....	Total.....	13	14	10	.....	.....	171	.....	145	26	.....	90	59	21	1	171
	Male.....	9	7	6	.....	.....	97	.....	85	12	.....	55	32	9	1	97
	Female.....	4	7	4	.....	.....	74	.....	60	14	.....	35	27	12	.....	74
Jay.....	Total.....	19	24	28	2	.....	340	2	329	12	1	151	131	59	1	342
	Male.....	11	13	14	1	.....	173	2	168	6	1	84	64	26	1	175
	Female.....	8	11	14	1	.....	167	.....	161	6	.....	67	67	33	.....	167
Jefferson.....	Total.....	28	24	38	9	2	326	19	312	26	7	122	143	75	5	345
	Male.....	16	12	18	4	1	166	10	161	10	5	72	76	24	4	176
	Female.....	12	12	20	5	1	160	9	151	16	2	50	67	51	1	169
Jennings.....	Total.....	10	17	15	6	.....	199	2	179	20	2	91	68	40	2	201
	Male.....	6	8	7	2	.....	93	.....	85	7	1	45	34	12	2	93
	Female.....	6	10	7	4	.....	106	2	94	13	1	46	34	28	.....	108
Johnson.....	Total.....	27	24	32	4	2	291	11	289	5	8	87	143	70	2	302
	Male.....	16	13	16	1	1	159	7	159	9	1	49	91	25	1	166
	Female.....	11	11	16	3	1	132	4	127	4	5	38	52	45	.....	136

TABLE No. 3—Continued.

COUNTIES.	Sex.		70 to 75	75 to 80	80 to 90	90 and over.	Unknown.	White.	Colored.	American.	Foreign.	Not Reported.	Single.	Married.	Widowed.	Not Reported.	Total.
Knox.....	Total.....		29	22	28	2	3	472	18	446	37	7	222	180	86	3	409
	Male.....		13	12	16	1	1	254	10	238	22	4	123	106	32	3	264
Kosciusko.....	Female.....		16	10	12	2	2	218	8	208	15	3	99	74	53	...	226
	Total.....		24	33	40	4	4	333	...	320	12	1	120	129	83	1	333
Lagrange.....	Male.....		14	21	26	4	...	171	...	161	9	1	57	75	38	1	171
	Female.....		10	12	14	...	...	162	...	159	3	...	63	54	45	...	162
Lake.....	Total.....		18	19	24	2	...	178	...	165	13	...	60	68	49	1	178
	Male.....		8	10	12	1	...	94	...	87	7	...	36	41	17	...	94
Lake.....	Female.....		10	9	12	1	...	84	...	78	6	...	24	27	32	1	84
Laporte.....	Total.....		26	25	40	1	8	949	4	611	299	43	557	257	91	48	953
	Male.....		15	13	17	1	8	594	3	351	206	40	353	155	42	47	597
Lawrence.....	Female.....		11	12	23	...	...	355	1	260	93	3	204	102	49	1	356
	Total.....		58	48	56	4	2	626	7	443	176	14	267	235	119	12	633
Lawrence.....	Male.....		23	29	27	1	2	329	5	234	89	11	150	134	38	12	334
	Female.....		35	19	29	3	...	297	2	209	87	3	117	101	81	...	299
Madison.....	Total.....		21	18	16	5	2	433	3	419	17	...	215	154	65	2	436
	Male.....		10	9	7	1	1	229	1	219	11	...	123	85	20	2	230
Marion.....	Female.....		11	9	9	4	1	204	2	200	6	...	92	69	45	...	206
	Total.....		54	43	54	10	5	840	17	797	42	18	392	298	162	5	857
Marion.....	Male.....		29	23	30	3	4	439	10	412	26	11	214	170	60	5	469
	Female.....		25	20	24	7	1	401	7	385	16	7	178	128	102	...	468
Marshall.....	Total.....		246	207	222	31	6	3,436	577	3,439	536	38	1,716	1,441	815	41	4,013
	Male.....		131	103	91	13	4	1,854	298	1,858	303	21	1,018	801	303	30	2,122
Marshall.....	Female.....		115	104	131	18	2	1,582	279	1,611	233	17	698	640	512	11	1,861
	Total.....		34	31	19	7	2	296	1	298	29	10	103	124	66	4	297
Marshall.....	Male.....		15	17	10	4	2	160	1	156	15	6	68	65	25	3	161
	Female.....		19	14	9	3	...	146	...	128	14	4	45	59	41	1	146

Martin.....	Total.....	8	11	13	2	1	173	.....	102	5	6	75	72	25	1	173
	Male.....	8	4	7	1	1	91	.....	83	2	5	45	38	7	1	91
	Female.....	.....	7	6	1	.....	82	.....	79	3	1	30	34	18	.....	82
Miami.....	Total.....	23	27	30	5	1	303	3	334	23	9	133	151	80	2	306
	Male.....	13	15	16	1	1	191	2	176	12	5	80	83	28	2	193
	Female.....	10	12	14	4	.....	173	1	158	11	4	53	68	52	.....	173
Monroe.....	Total.....	19	15	24	1	.....	283	8	278	5	8	130	111	50	.....	291
	Male.....	10	7	10	1	.....	151	5	146	.....	5	74	65	17	.....	156
	Female.....	9	8	14	.....	.....	132	3	132	.....	3	56	46	33	.....	135
Montgomery.....	Total.....	47	35	38	2	1	397	11	394	9	5	138	166	103	2	408
	Male.....	26	19	17	1	1	209	6	210	3	2	80	96	36	2	215
	Female.....	21	16	21	1	.....	188	5	184	6	3	58	70	63	2	193
Morgan.....	Total.....	24	19	26	4	1	294	3	275	7	5	108	105	72	2	287
	Male.....	16	13	8	2	1	151	2	147	4	3	69	53	29	2	153
	Female.....	8	6	18	2	.....	133	1	128	.....	2	39	52	43	.....	134
Newton.....	Total.....	10	8	5	3	.....	96	2	85	13	.....	31	38	28	1	98
	Male.....	4	3	2	2	.....	46	1	39	8	.....	18	18	10	1	47
	Female.....	6	5	3	1	.....	50	1	46	5	.....	13	20	18	.....	51
Noble.....	Total.....	27	36	34	4	.....	302	.....	275	25	2	94	125	82	1	302
	Male.....	15	14	19	3	.....	149	.....	135	12	2	47	71	30	1	149
	Female.....	12	22	15	1	.....	153	.....	140	13	.....	47	54	52	.....	153
Ohio.....	Total.....	5	9	13	2	.....	75	6	73	7	1	24	33	23	1	81
	Male.....	2	5	4	1	.....	41	2	39	4	.....	16	20	6	1	43
	Female.....	3	4	9	1	.....	34	4	34	3	.....	8	13	17	.....	38
Orange.....	Total.....	14	9	16	2	2	216	4	211	3	6	94	89	35	2	220
	Male.....	8	6	6	1	1	120	4	121	.....	3	63	48	11	2	124
	Female.....	6	3	10	1	1	96	.....	90	.....	3	31	41	24	.....	96
Owen.....	Total.....	17	15	16	5	1	177	1	165	10	3	65	79	31	3	178
	Male.....	10	10	10	1	.....	91	.....	84	5	2	35	43	13	.....	91
	Female.....	7	5	6	4	1	86	1	81	.....	1	30	36	18	3	87
Parke.....	Total.....	23	20	17	4	.....	303	5	290	14	4	137	116	54	1	308
	Male.....	13	13	10	2	.....	172	1	161	9	3	81	61	30	1	173
	Female.....	10	7	72	2	.....	131	4	129	5	1	56	55	24	.....	135
Perry.....	Total.....	9	15	13	2	1	190	6	157	38	1	96	77	33	.....	196
	Male.....	7	9	12	.....	.....	91	3	81	.....	.....	44	44	21	.....	100
	Female.....	2	7	6	2	.....	93	3	76	20	.....	42	33	31	.....	96

TABLE No. 3—Continued.

COUNTIES.	Sex.		70 to 75	75 80	80 to 90	90 and over.	Unknown.	White.	Colored.	American.	Foreign.	Not Reported.	Single.	Married.	Widowed.	Not Reported.	Total
Pike.....	Total.....	12	17	13	3	2	270	1	266	4	1	1	124	92	55	.....	271
	Male.....	5	6	7	1	1	111	1	109	.....	.....	.....	57	36	18	.....	111
	Female.....	7	11	6	2	1	159	.....	157	3	.....	.....	67	56	37	.....	160
Parker.....	Total.....	22	25	24	4	1	239	.....	163	73	.....	3	87	94	64	4	239
	Male.....	14	10	12	2	1	124	.....	84	38	.....	2	47	53	21	4	124
	Female.....	8	15	12	2	.....	115	.....	79	35	.....	1	40	42	33	.....	115
Posey.....	Total.....	16	16	28	2	2	268	38	266	37	.....	3	131	109	63	3	306
	Male.....	9	9	20	2	2	160	16	146	28	.....	2	83	61	31	1	176
	Female.....	7	7	8	.....	.....	108	22	120	9	.....	1	48	48	32	2	130
Pulaski.....	Total.....	13	18	12	1	.....	163	.....	134	27	.....	2	69	63	30	1	163
	Male.....	5	12	7	1	.....	76	.....	60	14	.....	2	30	32	13	1	76
	Female.....	8	6	5	.....	.....	87	.....	74	13	.....	.....	39	31	17	.....	87
Putnam.....	Total.....	34	25	28	7	2	325	3	308	14	.....	6	122	130	62	5	328
	Male.....	18	12	15	4	2	171	3	161	8	.....	5	68	77	24	5	174
	Female.....	16	13	13	3	.....	154	.....	147	6	.....	1	54	52	38	.....	154
Randolph.....	Total.....	18	28	36	7	.....	323	8	323	5	.....	3	139	123	68	1	331
	Male.....	8	15	17	5	.....	154	6	155	4	.....	1	74	61	24	1	160
	Female.....	10	13	19	2	.....	169	2	168	1	.....	2	65	62	44	.....	171
Ripley.....	Total.....	22	24	34	2	1	239	2	189	46	.....	6	83	93	64	1	241
	Male.....	14	16	22	2	1	134	1	102	27	.....	6	47	58	29	1	135
	Female.....	8	8	12	.....	.....	105	1	87	19	.....	.....	36	35	35	.....	106
Rush.....	Total.....	21	27	24	5	.....	245	9	246	7	.....	1	94	101	69	.....	254
	Male.....	11	13	10	2	.....	116	3	115	4	.....	4	48	52	19	.....	119
	Female.....	10	14	14	3	.....	129	6	131	3	.....	1	46	49	40	.....	135
Scott.....	Total.....	5	8	9	.....	.....	103	.....	101	1	.....	1	43	36	24	.....	103
	Male.....	1	3	4	.....	.....	50	.....	49	.....	.....	1	25	17	8	.....	50
	Female.....	4	5	5	.....	.....	53	.....	52	.....	.....	.....	18	19	16	.....	53

Shelby.....	Total.....	31	27	35	6	4	377	8	383	16	6	156	146	80	3	385
Male.....	Male.....	12	16	21	1	3	179	2	172	6	3	53	77	19	2	181
Female.....	Female.....	19	11	14	5	1	198	6	191	10	3	73	69	61	1	204
Spencer.....	Total.....	17	18	20	2	1	198	16	191	22	1	96	85	42	1	214
Male.....	Male.....	9	10	14	2	1	99	10	94	15	1	47	50	11	1	109
Female.....	Female.....	8	8	6	1	1	99	6	97	7	1	39	35	31	1	105
Starks.....	Total.....	12	3	7	2	1	134	1	108	27	2	57	59	19	1	135
Male.....	Male.....	8	1	3	1	1	67	1	52	14	2	31	30	7	1	68
Female.....	Female.....	4	2	4	1	1	67	1	54	13	1	26	29	12	1	67
Steenen.....	Total.....	26	16	27	1	1	186	1	172	14	1	56	80	49	1	186
Male.....	Male.....	16	6	18	1	1	102	1	95	7	1	29	52	20	1	102
Female.....	Female.....	10	10	9	1	1	84	1	77	7	1	27	28	29	1	84
St. Joseph.....	Total.....	61	46	63	9	1	1,082	15	854	220	23	553	300	172	12	1,097
Male.....	Male.....	27	30	37	1	1	564	9	439	120	14	300	195	69	9	573
Female.....	Female.....	34	16	26	8	1	518	6	415	100	9	253	165	103	3	524
Sullivan.....	Total.....	19	19	26	6	4	416	2	401	10	7	213	133	67	5	418
Male.....	Male.....	17	18	15	6	3	217	1	206	7	5	122	73	21	2	218
Female.....	Female.....	7	11	11	6	1	199	1	195	3	2	91	60	46	3	200
Switzerland.....	Total.....	14	20	12	2	2	156	1	143	12	1	65	57	33	1	156
Male.....	Male.....	8	9	9	2	1	80	1	61	8	1	39	37	13	1	80
Female.....	Female.....	6	11	3	1	1	66	1	82	4	1	26	20	20	1	66
Tipperance.....	Total.....	63	54	52	8	5	549	6	430	102	14	194	201	154	6	555
Male.....	Male.....	35	28	21	3	2	288	3	238	45	6	121	114	51	1	301
Female.....	Female.....	28	26	31	5	3	261	3	201	57	8	73	87	103	5	254
Tippon.....	Total.....	16	22	23	4	3	243	1	231	9	3	98	92	50	3	243
Male.....	Male.....	8	8	10	2	2	118	1	111	5	2	55	44	16	3	118
Female.....	Female.....	8	14	13	2	1	125	1	120	4	1	43	48	34	1	125
Union.....	Total.....	7	12	9	2	1	83	1	80	4	1	31	36	17	1	84
Male.....	Male.....	2	9	3	1	1	41	1	41	4	1	17	23	5	1	45
Female.....	Female.....	5	3	6	1	1	39	1	39	1	1	14	13	12	1	39
Vanderburgh.....	Total.....	67	61	72	10	1	1,006	170	980	195	21	522	373	274	7	1,176
Male.....	Male.....	41	31	37	6	1	539	82	496	102	11	300	206	100	5	611
Female.....	Female.....	26	30	35	4	1	477	88	483	93	10	222	167	174	2	565
Vermillion.....	Total.....	17	12	13	3	10	264	7	230	37	4	156	76	37	3	271
Male.....	Male.....	12	6	6	1	6	142	2	118	24	2	87	41	14	2	144
Female.....	Female.....	5	6	7	2	4	122	5	112	13	2	69	35	23	1	127

TABLE No. 3—Continued.

COUNTIES.	Sex.		70 to 75	75 to 80	80 to 90	90 and over.	Unknown.	White.	Colored.	American.	Foreign.	Not Reported.	Single.	Married.	Widowed.	Not Reported.	Total.
	Total.	Male. Female.	65 35 30	47 18 29	65 31 34	4 2 2	10 2 10	1,157 655 502	82 51 31	1,070 593 477	136 87 49	33 26 7	572 360 212	401 224 167	221 73 148	45 39 6	1,230 706 533
Vigo.....	Total.....	Male..... Female.....	65 35 30	47 18 29	65 31 34	4 2 2	10 2 10	1,157 655 502	82 51 31	1,070 593 477	136 87 49	33 26 7	572 360 212	401 224 167	221 73 148	45 39 6	1,230 706 533
Wabash.....	Total.....	Male..... Female.....	31 20 11	32 14 18	36 18 18	6 3 3	..... ..... .....	332 179 153	2 1 1	306 163 143	24 10 10	4 3 1	119 66 53	114 87 57	69 26 43	2 1 1	334 180 154
Warren.....	Total.....	Male..... Female.....	9 4 5	17 11 6	9 4 5	3 2 2	3 1 3	131 65 66	1 1	127 61 66	4 3 1	1 1	50 28 22	57 28 29	25 9 16	 67	132 65 67
Warrick.....	Total.....	Male..... Female.....	18 12 6	18 10 8	19 7 12	2 2 2	2 2 2	278 154 124	7 4 3	263 142 121	21 15 16	1 1	130 78 61	102 56 46	43 24 19	1 1	285 158 127
Washington.....	Total.....	Male..... Female.....	15 8 7	24 14 10	22 8 14	2 1 1	2 1 1	217 108 109	..... ..... .....	213 105 108	3 2 2	1 1	95 62 43	72 35 37	50 21 29	..... ..... .....	217 108 109
Wayne.....	Total.....	Male..... Female.....	56 33 23	48 24 24	60 26 34	13 10 3	1 1	609 315 294	42 20 22	575 304 271	62 27 35	14 4 10	249 134 115	237 134 103	155 60 95	10 7 3	651 335 316
Wells.....	Total.....	Male..... Female.....	18 12 6	21 11 10	22 9 9	2 2 .....	..... ..... .....	293 151 142	..... ..... .....	276 142 134	11 4 7	6 5 1	131 64 67	105 44 38	56 19 37	1 1 1	293 151 142
White.....	Total.....	Male..... Female.....	15 7 8	11 4 7	20 9 11	6 5 5	..... ..... .....	164 81 83	..... ..... .....	153 74 79	10 6 4	1 1	53 31 22	65 39 26	45 11 24	1 1	164 81 83

hitley	19	12	24	6	192	172	19	1	69	77	44	2	192
Male.....	9	8	14	6	106	93	12	1	38	48	19	1	106
Female.....	10	4	10	.....	86	79	7	.....	31	29	25	1	86
Total males.....	1,404	1,288	1,442	190	18,492	16,771	2,146	334	8,773	7,404	2,771	303	19,251
Total females.....	1,200	1,176	1,391	212	16,509	15,443	1,888	179	6,673	6,884	4,576	77	17,210
Grand total.....	2,604	2,464	2,833	402	35,001	32,214	3,734	513	15,446	13,288	7,347	380	36,461

TABLE No. 3—Continued.

COUNTIES.	Sex.	70 to 75	75 to 80	80 to 85	85 to 90	90 and over.	Unknown.	White.	Colored.	American.	Foreign.	Not Reported.	Single.	Married.	Widowed.	Not Reported.	Total.
Vigo.....	Total.....	65	47	65	81	4	10	1,157	82	1,070	126	33	572	401	221	45	1,290
	Male.....	35	18	31	45	2	10	655	51	533	87	26	300	234	73	39	1,706
	Female.....	30	29	34	36	2	.....	502	31	477	49	7	212	167	148	6	533
Wabash.....	Total.....	31	32	36	36	6	.....	332	2	306	24	4	119	114	69	2	334
	Male.....	20	14	18	18	3	.....	179	1	163	14	3	66	87	26	1	180
	Female.....	11	18	18	18	3	.....	153	1	143	10	1	53	57	43	1	154
Warren.....	Total.....	9	17	9	9	3	3	131	1	127	4	1	50	57	25	.....	132
	Male.....	4	11	4	4	2	.....	65	.....	61	3	1	28	28	28	.....	65
	Female.....	5	6	5	5	1	3	66	1	66	1	.....	22	29	16	.....	67
Warrick.....	Total.....	18	18	19	19	2	2	278	7	263	21	1	139	102	43	1	265
	Male.....	12	10	12	12	2	2	154	4	142	15	1	78	56	24	.....	188
	Female.....	6	8	7	7	.....	.....	124	3	121	6	.....	61	46	19	1	127
Washington.....	Total.....	15	24	22	22	2	2	217	.....	213	3	1	95	72	.....	.....	217
	Male.....	8	14	8	8	1	1	108	.....	105	2	1	50	35	21	.....	108
	Female.....	7	10	14	14	1	1	109	.....	108	1	.....	43	37	29	.....	109
Wayne.....	Total.....	56	48	60	60	13	1	609	42	575	62	14	249	237	155	10	651
	Male.....	33	33	26	26	10	1	315	20	304	27	4	134	134	134	7	335
	Female.....	23	24	34	34	3	.....	294	22	271	35	10	115	103	95	3	316
Wells.....	Total.....	18	21	22	22	2	.....	293	.....	276	11	6	131	105	56	1	293
	Male.....	12	11	13	13	2	.....	151	.....	142	4	5	64	67	67	1	151
	Female.....	6	10	9	9	.....	.....	142	.....	134	7	1	67	38	27	.....	142
White.....	Total.....	15	11	20	20	6	.....	164	.....	153	10	1	53	65	45	1	164
	Male.....	7	4	9	9	1	.....	81	.....	74	6	1	31	39	11	.....	81
	Female.....	8	7	11	11	5	.....	83	.....	79	4	.....	22	26	24	1	83

hitley	19	12	24	6	192	172	10	1	69	77	44	2	192
Male	9	8	14	6	106	93	12	1	38	48	19	1	106
Female	10	4	10	.....	86	79	7	.....	31	29	25	1	86
Total males	1,404	1,288	1,442	190	18,492	16,771	2,146	334	8,773	7,404	2,771	303	19,251
Total females	1,200	1,176	1,391	212	16,509	15,443	1,588	179	6,673	5,884	4,576	77	17,210
Grand total	2,604	2,464	2,833	402	35,001	32,214	3,734	513	15,446	13,288	7,347	380	36,461

TABLE No. 4.

Deaths in Indiana by Counties, for the Year 1907.

STATE AND COUNTIES.	Population, Estimated 1907. 34 > School Census.	Total Deaths Reported for Year 1907.	Annual Death Rate Per 1,000 Population.	Stillbirths.	IMPORTANT AGES.						DEATHS FROM IMPORTANT CAUSES.															
					Under 1 Year.	1 to 4 inclusive.	5 to 9 inclusive.	10 to 14 inclusive.	15 to 19 inclusive.	65 Years and over.	Pulmonary Consumption.	Other forms of Tuberculosis.	Typhoid Fever.	Diphtheria.	Croup.	Scarlet Fever.	Measles.	Whooping Cough.	Pneumonia.	Diarrheal Diseases under 2.	Cerebro-spinal Meningitis.	Influenza.	Puerperal Septicæmia.	Cancer.	Violence.	Smallpox.
State of Indiana.	2,714,744	36,461	13.4	2,019	7,599	2,286	703	601	1,067	10,737	3,888	634	933	336	17	91	213	136	3,202	1,639	180	666	196	1,513	2,464	8
Northern Counties	937,919	11,686	12.4	649	2,473	699	211	183	326	3,661	1,076	177	234	122	6	32	53	29	1,026	501	52	209	55	538	841	6
Adams.....	26,341	230	8.7	16	56	7	1	3	15	72	24	3	10	1					19	10	1	1	3	14		
Allen.....	92,477	1,128	12.1	49	199	53	25	35	345	72	116	22	21	14			2	1	108	35	4	11	6	61	88	
Benton.....	12,610	147	11.6	11	36	17		4	1	39	5	2	5	2					12	8	2	2		6	17	
Blackford.....	16,793	220	13.1	14	55	18		6	6	61	28	6	5	1		2	1	3	17	15		1	1	13	16	
Carroll.....	19,239	220	11.4	17	46	9	2	3	8	84	15	2	6						17	7	1	3		12	9	
Cass.....	36,165	496	13.7	22	83	30	9	5	11	144	50	7	7	9		1	1		46	13	3	10		19	42	
DeKalb.....	25,263	310	12.2	15	41	15	5	5	7	130	26	7	11			3			29	10		13		10	11	
Elkhart.....	46,578	653	14.0	26	116	28	13	11	13	237	57	7	7	11	1	2	3	3	55	14	3	14	5	41	43	
Fulton.....	18,438	200	10.8	10	42	10	1	1	6	79	14	2	1			1		2	13	6		10	2	9	13	
Grant.....	60,025	840	13.9	56	165	49	20	13	21	282	97	10	13	16			4		71	21	3	10	4	34	41	
Howard.....	30,283	410	13.5	47	115	19	12	8	17	117	43	8	11	6	1	1			37	9		8	3	17	27	1
Huntington.....	30,793	356	11.5	16	70	19	4	4	10	134	32	10	7			1		1	30	9	4	5		12	22	
Jasper.....	15,522	171	10.0	3	44	18	6	6	3	45	15	9	5	5	1	2	1		22	12		3		3	10	
Lafayette.....	27,651	342	12.2	21	72	28	7	8	14	101	45	7	7	4			6	1	25	31	3	4	3	15	20	
LaGrange.....	23,941	353	11.5	9	55	18	7	5	10	126	32	4	7			1	3		22	10	1	6	1	16	20	
Laporte.....	15,399	178	11.6	10	28	11	3	3	2	75	9	4	3	1					14	2		1	9	5	7	
Lewis.....	57,076	953	16.6	66	267	100	21	10	27	127	59	10	33	11	1	6	19	4	101	120	3	8	4	23	146	
Marshall.....	60,903	638	10.3	13	114	46	9	12	8	267	68	6	12	3		3	4	3	53	18	6	12	1	31	17	
Marshall.....	25,623	297	11.5	19	56	14	2	4	8	116	23	3	1						27	14	5	12	2	16	17	

TABLE No. 4—Continued.

STATE AND COUNTIES.	Population, Estimated 1907. 4 x School Census.	Total Deaths Reported for Year 1907.	Annual Death Rate Per 1,000 Population.	Stillbirths.	IMPORTANT AGENTS.						DEATHS FROM IMPORTANT CAUSES.														
					Under 1 Year.	1 to 4 inclusive.	5 to 9 inclusive.	10 to 14 inclusive.	15 to 19 inclusive.	25 Years and over.	Pulmonary Consumption.	Other forms of Tuberculosis.	Diphtheria.	Croup.	Scarlet Fever.	Measles.	Whooping Cough.	Pneumonia.	Diarrhoeal Diseases under 2.	Cerebro-spinal Meningitis.	Influenza.	Puerperal Septicæmia.	Cancer.	Violence.	Smallpox.
Shelby.....	25,794	385	14.9	17	71	16	3	10	17	129	44	6	8	1	..	..	..	..	..	..	..	..	..	..	..
Tipton.....	40,271	545	13.7	17	76	17	8	10	16	234	52	5	6	4	1	7	7	1	1	28	10	14	14	14	14
Tipton.....	18,181	243	13.3	13	43	16	9	4	6	82	21	5	6	4	1	7	7	1	1	19	10	10	10	10	10
Union.....	5,050	84	16.6	9	11	6	1	1	4	38	13	1	1	..	..	..	..	..	..	3	3	3	3	3	3
Vernillon.....	15,191	271	16.7	16	93	30	7	4	4	58	19	4	6	5	2	6	6	2	2	21	20	20	20	20	20
Vine.....	76,730	1,239	16.1	67	265	96	24	17	36	248	98	17	24	11	4	7	10	8	8	112	58	10	6	6	166
Warren.....	10,298	132	12.8	5	21	10	2	1	5	46	14	1	1	2	2	3	3	1	1	14	4	2	2	2	12
Wayne.....	24,233	661	19.0	25	105	18	10	8	16	228	80	6	6	3	2	3	3	1	1	29	15	2	21	2	31
Southern Counties	733,997	9,032	12.3	488	1,921	698	191	169	293	2,455	1,121	151	348	88	7	15	52	64	813	450	58	177	45	329	629
Clark.....	37,873	466	12.3	23	92	36	8	9	19	119	50	9	26	4	5	5	5	2	43	18	1	7	7	7	20
Oxford.....	14,525	170	11.7	3	19	13	5	1	8	56	43	1	4	..	..	..	..	..	1	1	1	1	1	1	20
Davies.....	33,978	358	10.5	25	100	31	8	7	12	83	51	13	15	7	1	2	2	2	26	20	6	6	6	6	8
Deuborn.....	21,880	316	13.2	13	54	18	11	7	12	123	29	8	7	4	1	9	1	1	28	19	1	4	3	3	10
Dubois.....	24,496	244	9.9	10	53	23	2	3	3	76	25	4	13	4	4	4	4	4	26	17	1	3	3	3	9
Floyd.....	33,680	454	13.4	17	83	25	10	7	15	154	40	6	20	4	1	1	6	6	35	16	1	13	1	18	27
Gilman.....	32,418	384	11.8	19	64	33	7	8	12	97	49	2	10	4	2	1	1	1	28	17	1	7	3	17	20
Greene.....	40,233	470	11.6	26	127	50	10	10	23	86	59	9	26	3	2	2	9	9	61	28	3	7	6	10	85
Harrison.....	23,180	262	11.3	16	60	21	3	10	6	85	23	2	14	2	1	3	3	3	22	13	2	3	2	10	8
Jackson.....	26,498	379	14.3	20	88	35	9	8	15	108	57	6	9	1	1	1	6	6	35	26	3	11	2	12	15
Jefferson.....	27,763	345	15.1	14	45	21	5	5	5	123	61	3	8	3	..	..	..	..	26	15	..	8	2	15	29
Jennings.....	16,334	201	12.3	6	40	16	8	12	3	30	5	5	5	3	2	2	4	4	17	9	1	1	1	9	12
Knox.....	40,225	400	12.1	23	114	41	13	12	13	108	53	1	22	3	2	1	9	9	62	20	1	11	3	11	33
Lawrence.....	32,515	436	13.4	23	106	41	13	10	16	170	57	7	15	5	1	2	2	2	35	34	1	34	3	10	43
Marion.....	16,065	173	10.7	7	40	11	5	2	5	42	24	7	6	4	1	1	1	1	12	10	1	3	1	11	6

Ohio.....	4,298	81	18.8	1	6	6	1	3	2	38	10	3	1	1	1	1	1	1	10	2	4	2	1	6	8
Orange.....	18,777	290	11.7	6	38	38	15	3	11	57	30	5	10	1	1	1	1	1	22	6	3	2	1	7	4
Perry.....	22,150	190	18.7	6	33	33	15	6	7	57	26	2	9	1	1	1	1	1	20	9	1	2	6	11	
Pike.....	23,143	211	11.7	25	65	65	26	8	4	66	10	10	22	1	1	1	1	1	12	17	3	1	10	17	
Posey.....	24,174	306	12.6	11	65	65	28	...	6	86	46	15	4	2	2	3	3	25	16	11	2	14	22	...	
Ripley.....	19,537	241	12.3	7	32	32	8	4	6	102	32	4	10	1	1	1	1	1	21	5	2	10	1	14	
Scott.....	9,611	103	10.7	7	27	27	11	1	2	40	17	4	3	...	...	...	...	11	6	1	2	4	4	1	
Spencer.....	23,117	214	9.2	13	47	47	15	5	3	71	24	1	6	4	2	2	2	15	9	2	6	...	11	9	
Sullivan.....	33,118	418	12.5	33	119	119	44	10	5	86	36	9	12	7	1	1	1	32	33	3	5	4	7	37	
Switzerland.....	10,157	156	15.3	13	33	33	12	1	3	57	25	5	5	...	...	...	...	6	6	4	...	...	18	5	
Van Wert.....	82,334	1,176	14.2	80	244	244	63	24	42	271	128	17	26	9	2	10	2	115	59	5	12	8	48	73	
Warrick.....	21,657	283	11.5	18	70	70	32	10	4	77	51	3	18	7	1	1	1	24	18	2	5	2	10	13	
Washington.....	19,747	217	10.9	11	44	44	12	13	5	76	23	2	12	1	1	1	1	22	9	5	4	...	7	10	

TABLE No. 5.
Death Rates by Counties for the Year 1907.

STATE AND COUNTIES.	Population Estimated 4 th School Census 1907.	Total Deaths Reported for the Year 1907.	Annual Death Rate per 1,000 Population.	DEATHS FROM IMPORTANT CAUSES.															
				Pulmonary Consumption.	Other Forms of Tuberculosis.	Typhoid Fever.	Diphtheria.	Croup.	Scarlet Fever.	Measles.	Whooping Cough.	Pneumonia.	Diarrheal Diseases Under 5.	Cerebro-spinal Meningitis.	Influenza.	Puerperal Septicemia.	Cancer.	Violence.	Smallpox.
State of Indiana.....	2,714,744	36,461	13.4	143.2	23.3	34.3	12.3	.6	3.3	7.8	5.0	117.9	60.3	6.6	24.5	7.2	55.7	90.7	.2
Northern Counties.....	937,919	11,696	12.4	114.7	18.8	24.9	13.0	.6	3.4	5.6	3.0	109.3	53.4	5.5	22.2	5.8	57.3	89.6	.6
Adams.....	26,341	230	8.7	91.1	11.3	37.9	2.7					72.1	37.9	3.7	3.7	11.3	53.1	60.7	.....
Allen.....	92,477	1,128	12.1	125.4	23.7	22.7	16.1			2.1	1.0	116.7	37.8	4.3	11.8	6.4	65.9	95.1	.....
Benton.....	12,610	147	11.6	39.6	15.8	36.6	15.8			15.8	7.9	95.1	63.4	15.8	15.8	6.4	47.5	134.8	.....
Blackford.....	16,783	220	13.1	166.7	35.7	29.7	5.9			5.9	17.8	101.2	89.3	5.9	5.9	5.9	77.4	95.2	.....
Carrish.....	19,239	220	11.4	77.9	10.3	31.1			10.3			88.3	36.3	5.1	15.5		62.3	46.7	.....
Cass.....	26,165	496	13.7	138.2	19.3	19.3	24.8		2.7	2.7		127.1	35.9	8.2	27.6		52.5	116.1	.....
DeKalb.....	25,263	310	12.2	102.9	27.7	43.5			11.8			114.7	36.5		51.4		39.5	43.5	.....
Elkhart.....	44,678	653	14.0	122.3	15.0	15.0	23.6	2.1	4.2	6.4	6.4	118.0	30.0	6.4	30.0	10.7	88.0	92.3	.....
Fulton.....	13,438	200	10.8	75.9	10.8	5.4		5.4			10.8	70.5	32.5		54.2	10.8	48.8	70.5	.....
Grant.....	60,025	840	13.9	161.5	16.6	21.6	26.6			6.6		118.2	34.9	4.9	16.6	6.6	56.6	68.3	.....
Howard.....	30,283	410	13.5	141.9	26.4	35.9	19.8	3.3	3.3			122.1	29.7		26.4	9.9	66.1	89.1	3.3
Huntington.....	30,793	366	11.5	103.9	32.4	22.7	12.9		3.2		3.2	97.4	29.2	12.4	16.2		38.9	71.4	.....
Jasper.....	15,622	171	10.0	96.6	57.9	32.2	32.2	6.4	12.8	6.4		141.7	77.3		19.3		19.3	64.4	.....
Jay.....	37,551	842	12.2	160.9	25.0	25.0	14.3		21.4	3.6	3.6	89.4	110.9	10.7	14.3	10.7	53.6	71.5	.....
Kosciusko.....	25,941	333	11.5	110.6	36.8	24.1			3.4	10.3		76.0	34.5	3.4	20.7	3.4	55.2	69.1	.....
Lagrange.....	15,330	178	11.6	88.7	26.0	19.5	6.5					91.3	13.0		58.7		32.6	45.6	.....
Lake.....	27,076	953	16.6	108.3	17.5	57.8	19.2	1.7	10.5	38.2	7.0	176.9	210.2	6.2	13.9	7.0	40.2	266.7	.....
Laporte.....	60,603	633	10.3	111.6	9.8	19.7	4.9		4.9	6.5	4.9	87.0	29.5	9.8	19.7	1.6	30.9	88.6	.....
Marshall.....	25,033	297	11.5	89.7	11.7	3.9						105.3	64.6	19.5	46.8	7.8	62.4	66.3	.....

TABLE No. 5—Continued.

STATE AND COUNTIES.		Population Estimated of School Census 1907.	Total Deaths Reported for the Year 1906.	Annual Death Rate per 1,000 Population.	DEATHS FROM IMPORTANT CAUSES.															
					Pulmonary Consumption.	Other Forms of Tuberculosis.	Typhoid Fever.	Diphtheria.	Croup.	Scarlet Fever.	Measles.	Whooping Cough.	Pneumonia.	Diarrhoeal Diseases Under 5.	Cerebro-spinal Meningitis.	Influenza.	Puerperal Septicæmia.	Cancer.	Violence.	Smallpox.
	Shelby.....	25,784	385	14.9	170.6	23.2	31.0	3.8	.....	.....	3.8	3.8	108.5	64.2	7.7	19.3	7.7	73.6	131.8	.....
	Tipperance.....	40,271	555	13.7	129.1	12.4	12.4	7.4	.....	.....	17.3	17.3	91.8	24.8	2.4	37.2	2.4	79.4	91.8	.....
	Tipton.....	18,181	213	13.3	115.5	27.5	33.0	22.0	.....	6.5	.....	104.5	55.0	11.0	16.5	5.5	60.5	82.5	.....	
	Union.....	6,050	84	16.6	257.4	.....	19.8	.....	.....	.....	.....	69.4	19.8	39.6	.....	39.6	.....	99.0	.....	
	Vermilion.....	16,191	271	16.7	117.3	24.7	37.0	30.8	.....	.....	12.3	37.0	129.6	123.5	6.1	49.4	18.5	37.0	191.4	.....
	Vincennes.....	76,730	1,239	16.1	127.7	22.1	44.3	14.3	.....	5.2	9.1	13.0	145.9	75.5	10.4	13.0	7.8	52.1	216.3	.....
	Warren.....	10,246	132	12.8	136.1	9.7	9.7	19.4	.....	.....	.....	136.1	38.8	.....	19.4	19.4	48.6	116.6	.....	
	Wayne.....	34,233	631	19.0	233.6	26.2	17.5	8.7	.....	5.8	8.7	2.9	151.9	43.8	5.8	61.3	17.5	90.5	102.2	.....
	Southern Counties.....	733,997	9,032	12.3	154.0	20.5	47.4	11.9	9	2.0	7.0	8.7	110.7	61.3	7.9	24.1	6.1	44.8	72.0	.....
	Clark.....	37,873	466	12.3	132.0	23.7	68.6	10.5	.....	13.2	7.9	13.2	113.5	47.5	2.6	18.4	.....	52.8	52.8	.....
	Crawford.....	14,525	170	11.7	296.0	0.8	27.5	.....	.....	.....	13.7	6.8	151.4	34.4	.....	65.0	13.7	20.6	55.0	.....
	Davies.....	33,978	358	10.5	150.0	38.2	44.1	20.6	2.9	.....	5.8	76.5	58.8	17.6	17.6	.....	23.5	44.1	.....	
	Dearborn.....	23,880	316	13.2	121.4	12.5	29.3	25.1	.....	4.1	37.6	4.1	159.1	37.6	4.1	16.7	12.5	41.8	83.7	.....
	Dubois.....	24,496	244	9.9	102.0	16.3	53.0	16.3	.....	.....	16.3	.....	106.1	69.3	.....	12.2	.....	36.7	61.2	.....
	Floyd.....	33,680	454	13.4	118.7	17.8	89.0	11.8	.....	2.9	2.9	17.8	103.9	47.5	2.9	38.5	2.9	53.4	80.1	.....
	Gibson.....	32,418	381	11.8	151.1	6.1	30.8	12.3	.....	6.1	3.0	.....	117.2	52.4	12.3	21.5	9.2	52.4	61.6	.....
	Greene.....	40,233	470	11.6	146.5	22.3	61.5	7.4	4.9	.....	22.3	126.6	69.5	7.4	17.3	14.9	22.3	89.4	.....	
	Harrison.....	21,180	262	11.3	99.2	8.6	60.3	8.6	.....	.....	12.9	12.9	91.9	56.0	8.6	30.1	4.3	43.1	34.6	.....
	Jackson.....	26,496	379	14.3	215.1	22.6	33.9	3.7	3.7	.....	3.7	22.6	132.9	98.1	11.3	41.5	7.5	45.2	56.6	.....
	Jefferson.....	22,785	345	15.1	267.6	13.1	36.0	13.1	.....	.....	4.3	8.7	114.0	65.8	.....	35.0	8.7	65.8	137.2	.....
	Jennings.....	16,334	201	12.3	183.9	30.6	30.6	19.3	.....	12.2	36.7	104.0	55.1	6.1	18.3	6.1	55.1	73.4	.....	
	Knox.....	40,225	490	12.1	131.7	2.4	54.6	14.3	.....	4.9	2.4	9.9	129.2	40.7	2.4	27.3	7.4	27.3	106.8	.....
	Lawrence.....	32,515	426	13.4	175.3	21.5	46.1	15.3	.....	.....	6.1	27.6	107.6	104.5	3.0	18.4	3.0	30.7	101.4	.....
	Marion.....	16,065	173	10.7	149.3	.....	37.3	24.8	.....	6.3	.....	6.3	74.6	62.2	6.2	18.6	.....	68.4	37.3	.....

Ohio.....	81	18.8	232.6	99.8	23.2	22.2	22.2	222.6	99.8	21.3	15.9	93.0	93.0	129.6	37.2	42.6
Orange.....	18,777	11.7	1,59.7	26.6	53.2	15.9	5.3	117.1	31.9	4.4	26.6	10.6	10.6	37.2	42.6	42.6
Perry.....	22,500	196	124.1	8.1	39.9	4.4	4.4	51.6	39.9	4.4	26.6	4.4	4.4	13.3	48.7	48.7
Pike.....	23,145	271	216.0	43.2	95.0	4.3	4.3	51.6	73.4	8.6	4.3	8.2	8.2	43.2	73.4	73.4
Posey.....	24,174	306	190.2	62.0	16.5	8.2	12.4	103.1	74.4	12.4	45.5	8.2	8.2	57.9	91.0	91.0
Ripley.....	19,537	241	163.7	20.4	51.6	5.1	.....	107.4	25.6	10.2	51.6	5.1	5.1	71.6	68.8	68.8
Scott.....	9,611	103	176.8	41.6	31.2	.....	.....	114.4	62.4	10.4	20.9	.....	.....	41.6	10.4	10.4
Spencer.....	23,117	214	103.8	4.3	25.9	17.3	8.6	64.8	34.6	8.6	25.9	.....	.....	47.5	38.9	38.9
Sullivan.....	33,178	418	108.5	27.1	36.1	21.0	3.0	96.4	96.4	9.0	15.0	12.0	12.0	21.0	115.5	115.5
Switzerland.....	10,157	156	246.1	49.2	49.2	.....	.....	89.0	89.0	89.0	89.0	89.0	89.0	177.2	49.2	49.2
Vanierburgh.....	82,384	1,176	155.4	20.6	31.5	10.9	2.4	1.9.6	71.6	6.0	14.5	9.7	9.7	58.2	88.6	88.6
Warrick.....	24,657	285	125.7	12.1	73.0	28.3	4.0	97.3	73.0	8.1	20.2	8.1	8.1	40.5	52.7	52.7
Washington.....	19,747	217	116.4	10.1	60.7	5.0	.....	111.4	25.3	10.1	20.2	20.2	20.2	36.4	50.6	50.6

TABLE No. 6.

Annual Death Rates for Eight Years, 1900 to 1908, with Averages of Cities of 5,000 Population and Over, Compared With Rural and State Rates.

	Popu- lation.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	Aver- age.
STATE.....	2,714,744	14.2	13.8	12.8	12.2	13.5	13.7	13.5	13.4	13.4
CITIES—										
Indianapolis.....	219,154	20.3	16.9	16.2	18.1	17.4	16.0	16.4	16.4	17.2
Evansville.....	63,957	15.2	14.5	11.2	14.7	14.9	14.4	15.1	13.8	14.2
Fort Wayne.....	50,947	13.1	14.8	14.1	14.8	14.0	13.9	16.3	15.7	14.6
Terre Haute.....	52,805	16.1	19.1	20.6	18.3	23.1	21.0	22.5	17.6	19.8
Auderson.....	22,509	16.5	17.5	16.7	14.6	15.5	12.1	13.3	13.1	14.9
Muncie.....	23,118	19.9	16.0	16.7	18.1	17.8	16.0	14.8	15.7	16.9
South Bend.....	44,005	16.1	15.0	14.6	19.2	15.9	17.1	16.8	16.1	16.3
Elkhart.....	17,501	16.1	13.2	12.5	14.3	15.4	13.6	14.0	14.2	14.1
Elwood.....	14,868	17.4	15.1	14.0	14.7	13.4	11.6	8.4	8.6	12.9
Hammond.....	15,966	10.5	14.8	18.1	19.1	15.4	15.2	17.9	17.2	16.0
Huntington.....	11,047	13.9	13.4	13.2	16.5	17.1	12.7	13.4	12.2	13.9
Jeffersonville.....	10,860	17.5	22.3	19.5	21.7	20.3	17.7	19.7	20.2	19.8
Kokomo.....	12,019	16.2	16.0	16.1	20.8	18.5	18.7	20.0	18.1	18.0
Lafayette.....	19,238	14.5	16.8	17.9	18.4	21.5	21.6	18.6	16.0	18.1
Logansport.....	17,932	15.4	17.5	15.1	15.9	17.6	17.1	16.0	14.8	16.1
Marion.....	24,030	16.9	15.8	15.5	17.5	16.6	14.0	13.6	11.5	15.1
Michigan City.....	17,292	10.7	14.7	14.5	18.6	14.7	14.1	14.3	16.4	14.6
New Albany.....	20,626	17.4	18.0	17.4	16.6	18.1	18.1	16.1	17.6	17.4
Percy.....	11,648	12.6	13.0	13.4	12.1	13.3	11.2	13.8	13.5	12.8
Richmond.....	19,602	17.4	16.6	18.3	14.0	15.8	14.0	16.1	15.2	15.9
Vincennes.....	11,393	12.5	19.2	17.8	15.1	22.2	20.7	20.0	18.5	18.2
Washington.....	10,045	14.9	16.5	14.6	15.5	15.9	14.2	16.5	11.5	14.9
Alexandria.....	8,823	12.3	16.1	13.9	14.1	11.4	4.4	6.9	7.9	10.9
Bedford.....	7,221	10.5	10.9	12.4	11.3	19.5	18.1	18.0	19.2	14.9
Bloomington.....	7,437	10.8	11.8	17.3	14.8	16.9	18.9	19.7	14.7	15.6
Brasil.....	8,538	7.8	10.0	14.1	8.0	20.0	12.5	12.8	16.9	12.7
Columbus.....	8,976	18.4	16.3	15.8	15.8	18.5	14.8	17.1	15.1	16.4
Connersville.....	7,751	12.7	16.0	13.2	13.9	17.6	14.8	15.3	15.3	14.8
Crawfordsville.....	6,873	17.1	16.4	17.4	13.9	20.5	20.0	20.3	22.1	18.4
East Chicago.....	7,500	4.0	6.5	10.1	9.3	12.4	14.5	18.5	32.2	13.4
Frankfort.....	7,572	17.3	15.5	14.1	17.0	15.1	20.0	18.7	17.6	16.9
Goshen.....	8,521	14.0	10.6	11.8	11.1	12.5	14.0	18.1	16.3	13.5
Greensburg.....	5,609	15.8	20.3	17.6	16.9	18.5	16.2	21.2	14.7	17.6
Hartford City.....	7,362	8.8	12.2	12.0	11.1	13.0	12.0	6.8	11.9	11.2
Laporte.....	7,136	13.1	15.4	13.7	17.3	18.2	17.5	20.7	19.8	16.9
Linton.....	9,767	.....	.....	8.6	9.7	12.5	11.8	11.7	10.4	10.7
Madison.....	8,936	19.4	16.3	18.0	15.1	17.7	15.0	18.4	19.8	17.8
Mishawaka.....	6,436	11.4	10.5	13.8	17.0	19.2	24.3	21.4	21.9	17.4
Mt. Vernon.....	5,303	19.0	21.6	22.4	16.0	17.9	18.4	17.9	18.8	18.7
Portland.....	5,507	12.8	13.2	16.7	12.1	13.6	14.1	16.7	13.0	14.0
Princeton.....	7,227	9.8	11.0	10.9	9.6	15.3	17.2	13.9	14.5	12.5
Seymour.....	6,483	14.2	13.9	12.9	13.0	16.1	15.8	15.6	16.6	14.7
Shelbyville.....	7,856	12.9	14.2	13.7	14.7	16.5	16.5	16.4	14.0	14.8
Valparaiso.....	6,756	11.9	11.9	10.9	13.9	15.6	11.5	12.4	11.2	12.4
Wabash.....	9,944	11.3	11.0	13.8	9.8	14.3	12.7	13.0	12.0	12.2
Whiting.....	5,500	.....	.....	.....	.....	11.4	10.3	14.1	14.7	12.6
Average.....	.....	14.6	15.3	15.3	15.4	16.8	15.8	16.4	15.6	15.6
COUNTRY.....	1,694,250	14.3	14.9	13.3	12.9	14.2	13.9	13.3	11.6	13.5

CHART

NORTHERN S

Total population. . . .
Total deaths.
Death rate per 1,000
Consumption, rate per
Typhoid rate per 100
Diphtheria, rate per
Scarlet fever, rate per
Diarrhoeal diseases, r

CENTRAL SAN

Total population. . . .
Total deaths.
Death rate per 1,000.
Consumption, rate per
Typhoid, rate per 100
Diphtheria, rate per
Scarlet fever, rate per
Diarrhoeal diseases, r

SOUTHERN S SECTION

Total population. . . .
Total deaths.
Death rate per 1,000
Consumption, rate per
Typhoid, rate per 100
Diphtheria, rate per
Scarlet fever, rate per
Diarrhoeal diseases, r
100,000.

TABLE A.

Births by Months, Color and Nationality of Parents, for the Year Ending December 31, 1907.

COUNTIES.	1907.												SEX.		COLOR.				NATIONALITY OF PARENTS.				Not Re- ported.			
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Males.	Females.	Total.	Males.	Females.	Total.	American.		Foreign.					
																			Fathers.	Mothers.	Fathers.	Mothers.			Fathers.	Mothers.
Adams.....	29	35	28	40	21	47	39	44	58	46	40	51	245	233	478	245	233	478	444	451	12	6	17	16		
Allen.....	112	76	81	91	137	101	132	259	133	142	126	134	793	711	1,504	790	706	1,496	1,161	1,216	186	131	137	137		
Bartholomew.....	35	43	51	52	65	46	55	57	50	53	44	30	296	265	561	294	262	556	1,662	1,662	8	3	8	3		
Benton.....	19	20	14	16	17	20	15	15	15	17	26	17	103	106	211	103	107	210	196	202	9	2	9	2		
Blackford.....	28	33	36	45	27	21	21	31	29	38	32	35	209	162	371	207	160	367	342	339	24	29	2	2		
Bloomington.....	45	38	32	31	37	29	34	38	32	32	34	35	239	182	417	237	187	424	407	409	1	1	1	1		
Brown.....	22	10	13	26	10	10	20	12	15	22	14	18	109	83	192	109	83	192	185	190	1	1	1	1		
Burns.....	41	28	26	34	33	23	36	27	28	31	35	33	205	169	374	205	169	374	364	365	2	2	2	2		
Cass.....	46	37	36	25	35	31	38	35	53	67	52	53	270	273	543	270	273	543	517	521	17	14	17	14		
Clark.....	40	37	36	25	35	31	38	35	36	41	52	34	290	180	440	286	167	453	436	435	7	7	7	7		
Clay.....	39	37	53	58	62	43	29	56	47	23	37	15	249	223	472	246	222	468	459	445	42	26	42	26		
Climon.....	61	40	45	30	43	34	49	61	36	33	46	47	287	238	525	286	238	524	515	513	1	1	1	1		
Crawford.....	19	22	20	14	16	20	20	16	22	17	16	16	113	102	215	113	102	215	139	153	68	46	17	16		
Daviess.....	48	61	79	69	66	44	53	74	68	79	57	70	382	366	748	378	366	744	731	741	1	1	1	1		
Dearborn.....	33	31	22	33	23	18	26	34	18	24	36	34	184	157	341	181	155	336	336	328	6	5	6	5		
Deer.....	29	23	31	31	23	21	20	51	32	43	35	27	189	197	386	188	196	384	378	379	2	2	2	2		
Delaware.....	39	32	22	28	20	6	91	42	29	21	27	20	200	174	374	200	174	374	340	349	8	8	8	8		
Dubois.....	130	103	90	110	111	75	119	112	99	106	92	91	629	609	1,238	612	592	1,204	1,193	1,207	26	18	26	18		
Dubois.....	39	36	35	32	28	24	32	29	42	20	11	19	174	164	338	174	164	338	707	724	40	33	40	33		
Elkhart.....	83	43	53	56	41	24	83	57	60	61	89	99	380	388	768	378	386	764	707	724	40	33	40	33		
Fayette.....	25	23	27	35	24	18	14	30	25	28	29	23	166	135	301	163	131	294	288	288	2	2	2	2		
Floyd.....	27	20	20	45	37	19	21	36	35	28	43	43	210	177	387	196	161	357	373	373	7	7	7	7		
Fountain.....	23	26	36	46	34	12	24	21	31	21	22	43	203	184	387	203	184	387	373	373	7	7	7	7		
Franklin.....	23	26	36	46	34	12	24	21	31	21	22	43	203	184	387	203	184	387	373	373	7	7	7	7		
Franklin.....	23	26	36	46	34	12	24	21	31	21	22	43	203	184	387	203	184	387	373	373	7	7	7	7		
Fulton.....	26	19	17	17	25	26	27	22	21	26	26	26	163	132	295	163	132	295	291	293	1	1	1	1		

TABLE A—Continued.

COUNTRIES.	1907.												Sex.			Color.				NATIONALITY OF PARENTS.										
													Males.		Females.		Total.		White.		Col'd.		American.		Foreign.		Not Re-ported.			
													Males.		Females.								Fathers.		Mothers.		Fathers.		Mothers.	
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.																		
Gibson.....	46	55	48	46	34	28	38	47	73	56	54		299	282	581	287	271	432	12	566	4	571	1	9	4					
Grant.....	77	78	59	60	66	48	74	73	116	87	106		480	445	925	465	432	441	15	894	15	894	14	9	4					
Greene.....	52	55	35	50	60	33	63	92	67	87	87		442	383	825	441	382	764	47	704	47	706	3	11	1					
Hamilton.....	34	28	32	36	36	36	36	41	42	35	52		277	230	507	268	225	268	9	484	6	478	7	2						
Hancock.....	34	34	17	26	31	20	26	21	27	26	33		175	161	336	173	160	173	2	327	7	329	7	2						
Harrison.....	35	17	27	37	32	22	40	38	45	46	82		217	181	398	214	179	214	3	383	3	396	3	1	1					
Hendricks.....	40	17	19	53	25	32	50	58	25	31	41		211	218	429	210	215	215	4	424	3	422	3	4	1					
Henry.....	51	41	35	43	31	30	32	31	56	41	57		256	208	464	252	205	241	4	453	4	456	4	1	1					
Howard.....	33	33	40	55	44	37	20	55	44	42	41		246	214	460	242	205	241	4	469	11	474	7	5	4					
Huntington.....	45	48	56	46	46	49	53	53	46	47	58		286	305	591	286	304	286	1	579	5	580	5	4	1					
Jackson.....	62	41	47	47	46	49	53	52	68	55	65		306	287	593	304	286	286	2	577	6	583	6	1	2					
Jasper.....	18	19	13	22	9	14	18	24	54	12	23		132	77	209	132	77	132	1	191	10	196	10	5	5					
Jay.....	58	54	63	48	51	44	56	50	54	42	49		318	300	618	317	297	317	3	591	6	598	6	5	2					
Jefferson.....	25	25	19	33	26	25	33	36	38	26	26		189	156	345	189	153	189	3	338	5	339	5	3	3					
Jennings.....	26	26	23	21	25	19	26	33	29	23	29		155	176	331	152	173	155	3	324	4	326	4	2	2					
Johnson.....	29	26	35	25	25	21	26	35	30	26	26		162	148	310	161	146	161	3	312	29	314	2	16	1					
Knox.....	81	72	89	85	67	65	74	75	90	72	77		473	453	926	466	445	473	7	882	901	882	18	9	1					
Koehnke.....	35	27	39	41	36	30	36	34	45	50	55		223	240	463	222	240	240	1	451	10	448	10	11	2					
Kearney.....	31	28	29	30	30	30	30	30	29	26	41		184	176	360	184	176	184	3	345	8	345	8	4	3					
Kate.....	95	97	97	97	97	97	97	97	97	97	97		522	506	1,028	522	505	522	1	535	485	536	485	6	3					
Laporte.....	59	51	37	46	46	46	46	46	46	46	46		381	387	768	381	387	381	1	547	251	547	177	7	3					
Lawrence.....	57	56	57	57	57	57	57	57	57	57	57		408	362	771	408	362	408	1	765	3	765	3	3	2					
Madison.....	127	100	99	110	93	78	121	105	121	119	115		669	621	1,290	664	615	664	6	1,199	69	1,210	69	16	14					
Marion.....	444	385	390	373	364	366	419	428	451	393	368		2,511	2,312	4,823	2,505	2,112	2,511	206	4,233	468	4,305	468	72	12					
Marshall.....	47	38	37	37	37	37	37	37	37	37	37		240	220	460	240	220	240	1	444	445	445	8	8						
Martin.....	19	16	12	17	16	13	18	16	19	16	16		186	186	372	186	186	186	1	372	186	372	186	186	186	186	186	186		
Miami.....	32	22	34	26	29	22	26	27	29	42	47		202	176	378	201	176	201	1	364	18	366	18	6	2	2				
Monroe.....	44	34	33	38	29	16	17	30	37	40	45		196	185	381	196	185	196	1	381	196	381	196	2	1	2				
Montgomery.....	55	50	53	48	45	53	51	56	45	45	56		253	236	489	253	236	253	4	489	253	489	253	2	1	2				

TABLE B.

Births, Number of Children Born to Each Mother, Grouped Ages of Parents, Still, Plurality and Illegitimate Births, Year Ending December 31, 1907.

COUNTIES.	NUMBER OF CHILDREN BORN TO EACH MOTHER.											
	Total Births.	First.	Second.	Third.	Fourth.	Fifth.	Sixth.	Seventh.	Eighth.	Ninth.	Tenth.	Eleventh.
Adams.....	478	104	85	64	72	53	29	25	10	14	6	8
Allen.....	1,504	392	353	253	155	91	65	54	36	36	14	7
Bartholomew.....	581	170	111	104	64	36	34	25	9	7	4	5
Benton.....	211	63	52	26	17	10	15	8	4	6	2	1
Blackford.....	371	83	95	71	38	21	22	15	12	8	1	5
Boone.....	417	135	90	64	38	35	24	13	7	7	5	3
Brown.....	192	38	33	31	26	13	11	10	12	3	2	3
Carrill.....	374	104	67	55	40	30	14	17	9	8	3	4
Cass.....	546	173	115	96	45	35	24	14	9	8	3	14
Clark.....	440	121	86	61	58	35	23	15	13	6	3	1
Clay.....	479	146	83	55	64	35	30	19	20	6	4	4
Clinton.....	325	156	113	53	53	35	22	19	14	8	5	3
Crawford.....	150	43	43	23	13	8	8	7	5	5	2	2
Darke.....	713	183	124	83	50	79	51	46	25	19	6	9
Dearborn.....	341	91	73	54	41	29	13	12	6	5	2	5
Deertr.....	394	112	71	66	50	31	21	8	8	3	3	10
Dekalb.....	374	125	63	62	50	28	17	9	10	3	1	1
Dekane.....	1,258	303	272	183	112	67	41	46	29	14	10	14
Dubois.....	55	16	16	13	11	5	5	10	7	4	1	1
Fayette.....	264	85	68	49	27	33	26	19	7	5	5	5
Fulton.....	768	264	166	109	81	52	38	23	14	9	5	1

[illegible]

TABLE B—Continued.

COUNTIES.	Total Births.	NUMBER OF CHILDREN BORN TO EACH MOTHER.												
		First.	Second.	Third.	Fourth.	Fifth.	Sixth.	Seventh.	Eighth.	Ninth.	Tenth.	Eleventh.	Twelfth and over.	Not reported.
Pike.....	316	61	76	49	41	33	17	12	7	5	3	3	1	5
Perry.....	321	84	68	48	27	30	17	17	17	6	3	1	1	5
Pike.....	418	100	93	53	47	35	28	22	15	7	3	2	2	5
Porter.....	332	117	79	60	25	26	16	7	9	3	3	3	1	4
Posey.....	408	97	76	61	63	41	29	17	10	5	4	4	...	1
Pulaski.....	161	43	29	14	21	11	11	8	8	5	7	1	3	...
Tipton.....	428	116	87	72	44	35	27	18	13	3	7	2	2	6
Ramoth.....	607	142	141	112	69	49	29	20	16	13	6	2	2	1
Ripley.....	385	98	81	69	45	23	16	12	10	7	5	1	1	7
Rush.....	282	75	73	42	27	25	14	12	4	3	4	...	...	2
Scott.....	173	52	45	23	16	17	11	4	1	...	2	...	...	2
Shelby.....	309	87	73	49	38	27	10	10	5	2	3	1	2	3
Spencer.....	398	87	72	44	45	33	30	23	12	3	3	1	2	13
Stark.....	208	48	35	37	19	21	13	13	7	5	1	4	6	...
Steuben.....	155	52	39	20	21	5	5	2	2	4	...	2	...	3
St. Joseph.....	1,951	544	409	313	222	131	97	65	57	31	24	20	15	23
Sullivan.....	620	181	133	99	73	51	23	31	14	3	5	4	2	1
Sullivan.....	194	56	46	24	22	11	9	11	6	...	4	1	2	4
Tipton.....	549	160	128	90	70	28	21	22	14	7	3	...	1	6
Tipton.....	409	111	81	57	56	27	29	16	13	10	2	3	1	3
Union.....	106	32	20	22	10	8	5	3	3	2	...	1	...	...
Vanderburgh.....	1,470	491	307	207	150	99	65	49	29	26	17	4	11	2
Vermillion.....	356	106	79	40	47	32	22	6	10	3	...	3	2	...
Vigo.....	1,474	492	296	224	152	102	60	41	37	23	17	12	7	12

Walash	484	133	103	64	50	30	14	12	8	9	3	1	2	6
Warren	203	60	36	37	29	14	11	6	6	1	2	...	...	4
Warri-k	393	82	80	74	34	31	26	18	13	13	7	4	5	9
Washington	219	61	36	29	24	22	13	12	7	3	6	1	1	1
Wayne	708	228	181	117	55	49	25	25	12	3	9	1	...	3
Wells	483	137	73	54	36	36	23	13	6	6	8	2	6	2
White	321	82	60	40	31	23	23	26	7	6	4	3	5	10
Whitley	280	71	63	54	30	18	15	11	5	2	2	1	2	6
Grand Total	49,112	14,274	10,626	7,575	6,201	3,677	2,456	1,760	1,228	751	491	291	274	605

TABLE B—Continued.

Births, Number of Children Born to Each Mother, Grouped Ages of Parents, Still, Plurality and Illegitimate Births, Year Ending December 31, 1907.

COUNTIES.	GROUPED AGES OF PARENTS.												Still-births.		Plurality Births.		Illegitimate Births.					
	Under 20.		20 to 30.		30 to 40.		40 to 50.		50 to 60.		60 to 70.		70 to 80.		Not Reported.		Males.	Females.	Males.	Females.	Males.	Females.
	Fathers.	Mothers.	Fathers.	Mothers.	Fathers.	Mothers.	Fathers.	Mothers.	Fathers.	Mothers.	Fathers.	Mothers.	Fathers.	Mothers.	Fathers.	Mothers.						
Adams.....	4	42	173	246	216	159	58	23	12	12	4	6	3	3	2	5	7	3	2	2	2	
Allen.....	3	92	599	817	543	445	208	76	21	1	5	105	53	23	9	9	20	10	20	10	13	
Bartholomew.....	5	65	255	312	219	167	98	26	15	4	4	7	3	8	1	9	7	9	3	3	3	
Benton.....	7	16	87	103	68	53	16	10	4	1	1	29	22	3	3	3	1	4	10	7	1	
Blackford.....	7	42	171	211	135	99	46	15	8	1	1	1	1	6	3	3	3	2	7	7	1	
Bone.....	9	53	184	204	147	132	57	15	5	3	2	5	5	7	3	5	11	5	5	4	4	
Brown.....	2	23	67	101	78	52	32	14	3	2	2	6	2	2	2	2	2	2	2	2	1	
Carrill.....	3	36	149	210	145	104	62	17	4	3	3	4	4	9	8	4	7	2	2	2	4	
Cass.....	9	58	230	264	175	145	67	24	12	1	1	45	48	5	5	9	5	9	3	3	5	
Clark.....	17	53	160	212	181	151	53	18	12	1	1	11	1	10	5	4	6	4	4	4	4	
Clay.....	9	65	211	246	187	140	53	20	10	1	1	6	2	6	2	2	10	2	7	1	3	
Clinton.....	6	60	256	303	171	123	68	28	8	1	1	6	2	2	6	1	6	10	7	3	3	
Crawford.....	59	74	71	62	41	52	26	20	13	4	4	11	1	1	1	1	2	2	1	1	1	
Darvels.....	7	63	302	396	296	241	112	39	10	1	3	9	2	4	4	4	7	7	4	2	7	
Dearborn.....	3	22	134	185	131	105	54	23	5	1	1	9	2	4	4	4	4	4	4	4	4	
Decatur.....	1	36	163	216	144	109	54	17	10	2	2	7	3	6	5	4	4	6	4	3	3	
DeKalb.....	1	33	173	208	145	114	37	12	9	1	1	5	3	8	4	4	6	2	4	6	2	
Delaware.....	24	161	566	659	440	361	160	44	21	3	3	1	10	26	12	10	15	14	10	14	20	
Dubuque.....	2	12	135	186	135	120	52	15	10	2	1	4	3	2	2	2	2	2	1	1	1	
Edwards.....	9	83	344	453	260	184	85	38	3	1	1	62	6	13	4	4	4	4	4	4	8	

TABLE B—Continued.

Births, Number of Children Born to Each Mother, Grouped Ages of Parents, Still, Plurality and Illegitimate Births, Year Ending December 31, 1907.

COUNTIES.	GROUPED AGES OF PARENTS.														Still-births.		Plurality Births.		Illegitimate Births.	
	Under 20.		20 to 30.		30 to 40.		40 to 50.		50 to 60.		60 to 70.		70 to 80.								Not Reported.
	Fathers.	Mothers.	Fathers.	Mothers.	Fathers.	Mothers.	Fathers.	Mothers.	Fathers.	Mothers.	Fathers.	Mothers.	Fathers.	Mothers.	Males.	Females.	Males.	Females.	Males.	Females.
Adams.....	4	42	173	246	216	159	58	23	12	12	4	.....	.....	.....	2	5	7	3	2	3
Allen.....	3	92	599	817	543	445	208	76	21	21	5	.....	.....	.....	23	9	20	0	10	14
Bartholomew.....	5	65	255	312	219	167	68	26	15	15	4	.....	.....	.....	8	9	7	0	2	2
Benton.....	.....	16	87	103	68	53	16	10	4	.....	.....	.....	.....	.....	.....	.....	4	10	.....	.....
Blackford.....	7	42	171	211	135	99	46	15	8	1	1	.....	.....	.....	.....	3	2	.....	1	1
Bonne.....	9	53	184	204	147	122	57	15	5	.....	.....	.....	.....	.....	7	3	11	5	4	1
Brown.....	2	23	67	101	78	53	32	14	3	.....	.....	.....	.....	.....	2	2	2	2	2	4
Carrull.....	3	36	149	210	145	104	62	17	4	.....	.....	.....	.....	.....	9	8	7	8	4	4
Cass.....	9	58	230	264	175	145	67	24	12	.....	.....	.....	.....	.....	1	1	5	9	3	5
Clark.....	17	53	160	212	181	151	53	18	12	.....	.....	.....	.....	.....	10	5	6	4	4	4
Clay.....	9	65	211	246	187	140	53	20	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Clinton.....	6	60	256	303	171	123	68	28	8	.....	.....	.....	.....	.....	6	2	10	7	1	3
Crawford.....	59	74	71	62	41	52	26	26	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Darless.....	7	63	302	396	296	241	112	30	10	.....	.....	.....	.....	.....	11	1	7	2	6	7
Dearborn.....	3	22	134	185	131	106	54	23	5	.....	.....	.....	.....	.....	.....	.....	4	4	.....	4
Deatur.....	1	26	163	216	144	109	54	17	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
DeKalb.....	.....	.....	173	276	145	114	37	13	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
DeSaiue.....	1	33	173	276	145	114	37	13	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
DeWae.....	24	161	566	690	440	361	160	44	21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dubu.....	2	12	135	186	135	120	52	15	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Elkhart.....	9	83	244	453	260	184	56	38	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

[illegible]

TABLE B—Continued.

COUNTIES	GROUPED AGES OF PARENTS.													
	Under 20.		20 to 30.		30 to 40.		40 to 50.		50 to 60.		60 to 70.		70 to 80.	
	Fathers.		Mothers.		Fathers.		Mothers.		Fathers.		Mothers.		Fathers.	
	Fathers.	Mothers.	Fathers.	Mothers.	Fathers.	Mothers.	Fathers.	Mothers.	Fathers.	Mothers.	Fathers.	Mothers.	Fathers.	Mothers.
Parke.....	3	37	117	176	134	87	39	7	7				7	
Perry.....	5	26	134	192	122	86	50	16	5		1		4	
Pike.....	11	54	175	211	151	124	59	23	11			1	9	1
Porter.....	4	29	158	194	120	113	61	11	6		1		1	
Posey.....	1	19	152	234	172	128	66	23	11		1		2	1
Pulaski.....		13	66	76	53	52	37	15	2				2	
Putnam.....	4	46	172	225	176	131	48	20	12		1		12	
Randolph.....	9	68	277	333	207	166	75	26	17		3		9	1
Ripley.....			33	45	29	30	21	6	3				13	7
Rush.....	3	27	129	156	97	86	38	12	11				3	1
Scott.....	5	23	79	99	67	43	18	7	1				1	
Shelby.....	5	29	143	192	124	72	28	10	3		1		4	
Spencer.....	1	30	108	168	123	60	23	10					8	7
Stark.....	3	20	71	102	84	70	40	13	6				3	1
Steuben.....		19	75	94	51	38	18	7			1		2	
St. Joseph.....	8	142	847	1,093	790	600	243	67	22		3		37	23
Sullivan.....	7	161	426	528	338	125	35	17	7				2	10
Switzerland.....	4	18	77	104	74	63	22	10	6				2	6
Tipton.....	2	60	293	229	229	175	95	23	11				3	1
Union.....	10	42	167	202	154	135	59	24	5				4	7
Vanderburgh.....	1	11	47	65	45	28	11	2	1				4	6
Vanderburg.....	31	145	677	776	500	445	298	88	19				26	18
Vermillion.....			159	194	130	82	40	11	3				3	15
Vigo.....	33	166	635	834	492	362	210	60	32				20	12
Illustrious Births.														
Plurality Births.														
Still-births.														
Illegitimate Births.														
Males.	6	3	11	1	1	1	1	1	1	1	1	1	1	1
Females.	2	3	12	4	4	4	4	4	4	4	4	4	4	4

Wabash.....	8	39	208	204	161	104	48	22	4				1	1	3	3	1	1	4	4	3	3
Warren.....	3	20	90	113	72	54	23	3	10				5	5	3	3	3	3	2	2	2	2
Warrick.....	7	29	148	209	157	125	65	25	9	1	1		4	4	2	11	2	2	7	7	3	3
Washington.....	4	20	95	106	74	72	35	15	6	.....	.....	.....	2	2	3	5	1	.....	.....	.....	.....	
Wayne.....	14	60	335	405	254	214	82	25	16	.....	.....	.....	4	4	1	8	3	3	3	3	0	
Wells.....	10	89	224	245	154	117	66	20	10	.....	.....	.....	11	11	4	5	9	8	8	8	3	
White.....	2	26	118	156	127	119	59	18	4	.....	.....	.....	2	1	5	3	2	2	5	3	2	
Whitley.....	5	23	136	138	93	92	29	16	4	1	1	.....	6	6	4	6	2	6	6	.....	2	
Grand total.....	702	5,276	21,267	26,334	17,644	13,844	6,379	2,175	949	19	126	15	1,534	968	712	511	532	450	460	424	424	

TABLE C.
Marriages by Months, Color and Nationality, Year Ending December 31, 1907.

COUNTIES.	1907.												Color.		NATIONALITY.						Total.		
													White.	Colored.	American.		Foreign.		Not Reported.				
															Grooms.	Brides.	Grooms.	Brides.	Grooms.	Brides.			
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.											
Adams.....	16	15	18	26	24	31	12	10	19	22	10	15	218	..	209	214	9	4	..	..	218		
Allen.....	46	65	37	72	68	90	55	49	85	96	69	83	821	3	761	777	59	45	4	2	834		
Bartholomew.....	18	14	10	22	16	24	14	20	29	31	28	26	245	4	203	191	26	33	20	20	249		
Benton.....	14	12	5	5	6	10	5	6	11	9	10	7	108	..	96	98	2	..	..	..	108		
Blackford.....	11	8	13	12	10	12	8	14	13	16	9	15	142	1	132	132	11	11	..	..	143		
Boone.....	29	24	17	22	12	19	15	19	25	26	23	18	249	..	249	249	..	..	..	..	249		
Brown.....	12	5	7	6	4	4	4	4	9	3	7	11	183	..	183	183	..	..	..	..	183		
Carroll.....	9	11	14	13	8	7	11	16	22	25	13	16	167	..	167	167	..	..	..	..	167		
Cass.....	20	25	16	37	32	47	21	13	20	32	43	30	242	5	320	321	24	24	3	2	347		
Cast.....	69	58	68	80	67	94	69	110	98	116	89	98	881	155	1,019	1,024	17	12	..	..	1,086		
Clay.....	31	29	31	6	29	45	23	17	30	35	22	32	326	4	313	321	17	9	..	..	330		
Clinton.....	15	28	25	17	17	22	19	30	35	35	26	39	308	2	303	310	..	..	1	..	310		
Chambers.....	9	10	11	12	10	14	12	14	16	9	11	12	140	..	136	101	37	36	17	13	140		
Daviess.....	2	22	9	22	18	13	13	10	29	16	21	20	227	3	230	230	..	..	..	..	230		
Deaiborn.....	10	14	10	14	18	34	24	27	21	25	19	18	233	2	230	230	4	4	..	..	234		
Denton.....	14	11	29	15	13	17	4	12	18	17	15	16	179	1	177	178	1	..	2	2	180		
DeKalb.....	21	17	20	11	15	20	10	10	15	18	23	22	224	..	219	223	5	1	..	..	224		
DeKalb.....	66	59	53	63	49	68	68	49	84	70	40	35	563	21	571	572	8	9	..	2	583		
DeKalb.....	35	36	30	28	24	42	15	23	28	60	36	32	430	3	408	403	15	13	13	17	432		

Elyette.....	7	3	2	13	11	14	12	7	7	11	5	12	102	2	104	104	3	19	17	104
Foyt.....	17	18	14	32	17	26	28	29	29	25	28	13	278	20	277	278	1	2	1	278
Fontan.....	19	17	15	18	10	18	15	17	17	25	26	31	214	2	216	214	36	19	17	216
Franklin.....	12	10	7	16	8	11	12	13	13	20	7	7	145	.....	90	145	.....	.....	.....	145
Fulton.....	12	16	11	10	10	11	12	11	11	20	14	8	148	.....	148	148	.....	.....	.....	148
Gibson.....	16	20	20	22	17	16	23	22	22	14	17	17	199	22	210	221	2	.....	.....	221
Grant.....	43	26	27	45	27	69	45	63	63	41	55	35	549	19	548	547	7	1	4	548
Greene.....	23	23	28	28	25	27	30	25	32	41	30	32	337	.....	548	549	9	8	.....	548
Hamilton.....	22	9	22	23	15	28	10	20	20	26	28	33	277	6	279	282	3	1	.....	283
Harbeck.....	13	17	10	23	7	10	19	14	14	25	5	16	164	2	165	165	1	.....	.....	166
Harrison.....	18	7	14	11	13	11	8	13	11	11	12	16	140	3	143	143	.....	.....	.....	143
Henricks.....	6	18	13	14	6	16	18	11	11	19	9	18	157	2	158	159	.....	.....	.....	159
Hendricks.....	20	17	20	24	21	20	21	31	29	23	23	30	260	5	264	264	.....	1	1	285
Hogart.....	23	16	29	33	34	20	37	36	19	32	39	32	331	9	333	333	7	5	2	340
Huntinton.....	15	16	8	17	14	30	12	24	17	30	16	19	214	.....	217	217	.....	1	1	218
Jackson.....	21	13	11	19	21	17	19	21	20	18	20	22	221	1	219	222	3	.....	.....	223
Jasper.....	12	9	4	10	6	5	5	8	9	8	8	10	96	.....	87	89	9	7	.....	96
Ja.....	17	26	16	16	15	22	10	14	17	37	26	34	249	.....	247	210	3	.....	.....	240
Jefferson.....	19	17	17	28	11	25	19	16	29	31	23	21	212	11	248	250	6	4	.....	254
Jennings.....	12	17	9	16	12	12	7	9	18	11	12	15	149	1	149	150	1	.....	.....	150
Johnson.....	14	12	9	16	14	16	14	11	21	22	9	17	174	1	175	175	.....	.....	.....	175
Knox.....	20	23	18	42	26	38	16	25	34	49	63	52	401	5	385	397	21	16	1	406
Koerisko.....	20	20	28	26	24	16	18	20	28	21	27	26	273	1	270	272	4	2	.....	274
Lagrange.....	12	12	14	11	7	10	8	7	14	18	16	19	148	.....	143	146	5	2	.....	148
Lake.....	97	75	72	51	61	63	86	80	86	183	173	145	1,160	12	573	584	582	1	6	1,172
Laporte.....	26	22	11	33	37	57	45	38	46	50	38	18	415	6	327	326	83	84	11	421
Lawrence.....	19	18	15	32	22	18	26	22	30	34	21	16	273	.....	273	273	.....	.....	.....	273
Lawson.....	34	54	58	63	59	64	78	45	70	65	65	72	665	15	672	680	29	21	.....	701
Marion.....	161	150	125	337	201	306	184	210	348	215	122	122	2,227	323	2,428	2,452	114	93	8	2,550
Marshall.....	21	15	21	18	10	19	14	15	20	13	23	17	206	.....	204	204	2	.....	.....	206
Martin.....	10	13	5	9	4	5	10	13	6	17	15	9	116	.....	116	116	.....	.....	.....	116
Miami.....	18	17	22	19	5	18	23	21	32	42	41	36	284	.....	285	287	9	7	.....	294
Monroe.....	18	23	12	14	10	25	13	24	26	29	16	20	228	2	230	230	.....	.....	.....	230
Montgomery.....	15	19	26	19	22	34	16	27	31	27	27	32	292	3	279	280	2	14	15	286
Morgan.....	16	20	29	23	11	24	18	19	26	14	16	22	238	.....	238	238	.....	.....	.....	238
Murphy.....	8	14	6	7	8	12	7	7	5	9	8	11	102	.....	95	97	7	5	.....	103
Nelson.....	17	16	13	13	5	21	12	13	17	20	24	21	162	.....	184	190	8	2	.....	192
Noble.....	5	5	8	2	3	4	5	3	4	6	5	9	53	1	54	54	.....	.....	.....	54
Ohio.....	13	7	16	1	11	13	11	20	9	28	9	27	161	4	165	165	.....	.....	.....	165
Orange.....	24	24	10	36	14	24	11	10	9	40	10	32	238	6	244	244	.....	.....	.....	244
Owen.....	24	24	10	36	14	24	11	10	9	40	10	32	238	6	244	244	.....	.....	.....	244

TABLE C—Continued.

COUNTIES.	1907.												Coloza.		NATIONALITY.						Total.		
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	White.	Colored.	American.		Foreign.		Not Reported.				
															Grooms.	Brides.	Grooms.	Brides.	Grooms.	Brides.		Grooms.	Brides.
Parke.....	14	17	15	18	11	21	13	16	22	20	13	21	199	2	186	191	14	9	1	1	201		
Perry.....	9	10	12	15	10	13	8	10	12	16	17	13	143	2	121	132	19	12	5		145		
Pike.....	12	18	21	14	16	12	9	17	20	21	19	22	199	2	199	201	2				201		
Prior.....	34	10	8	21	14	21	14	13	6	23	18	10	192	2	162	148	35	31	6	13	192		
Perry.....	15	10	14	13	21	22	14	18	28	27	16	15	201	12	212	213	1				213		
Pulaski.....	7	15	8	12	3	10	6	7	14	8	11	19	119	1	117	117	2	2	1	1	120		
Pittman.....	18	10	12	23	11	26	14	15	22	30	15	21	213	4	215	217	2				217		
Randolph.....	20	15	14	9	13	24	15	26	22	26	27	30	237	4	238	239	3	2			241		
Ripley.....	13	7	5	16	15	12	13	7	16	25	30	9	168						168	168	168		
Rush.....	16	10	10	9	11	15	7	10	16	15	16	21	154	1	165	155					156		
Scott.....	7	8	10	5	3	5	8	6	16	11	11	14	104		104	104					104		
Shelby.....	15	17	4	11	16	11	15	22	18	33	18	17	199	8	205	207	2				207		
Spencer.....	7	9	12	16	15	16	16	22	13	38	32	21	206	11	188	189	20	28			217		
Starke.....	6	6	3	14	5	4	6	7	6	6	18	5	85	1	60	60	36	27			86		
Steuben.....	15	9	11	21	12	16	11	6	8	11	14	15	162	1	162	151	1	1			153		
St. Joseph.....	72	66	56	69	42	85	87	67	91	61	104	84	841	20	673	711	209	168	2	5	884		
Sullivan.....	30	20	34	24	29	19	17	23	32	26	27	27	320		308	308	20	20	2	2	330		
Switzerland.....	6	11	4	7	2	9	4	1	9	9	5	7	74		74	74					74		
Tippah.....	30	36	23	25	33	59	31	25	34	37	36	26	283	5	376	390	22	8			398		
Tipton.....	14	16	20	9	10	7	6	11	16	19	19	26	173		171	172	2		1		173		
Union.....	11	2	...	3	1	6	2	...	7	8	6	9	55		55	55					55		
Vanderburgh.....	68	72	76	92	84	127	84	79	80	88	119	78	947	90	983	994	46	27	8	16	1,057		
Vermillion.....	21	9	11	10	8	19	16	15	21	15	12	20	140	1	146	146	37	37			157		
Vigo.....	76	76	66	86	78	120	87	90	96	110	88	92	1,003	63	1,003	1,009	54	48	9	9	1,066		

Walsh.....	13	13	12	20	26	24	16	36	20	21	24	242	3	244	245	1	1	245
Warren.....	12	5	2	3	9	3	7	13	7	5	70	70	1	70	70	1	1	80
Warrick.....	14	9	10	10	9	26	14	10	27	19	177	172	5	177	177	1	1	177
Washington.....	14	17	9	8	17	11	13	10	9	19	163	163	.....	163	163	.....	.....	163
Wayne.....	18	26	22	19	40	23	39	43	28	39	312	312	26	342	345	6	3	348
Wells.....	21	23	30	18	16	16	19	17	16	23	228	228	.....	227	227	1	1	228
White.....	13	12	4	4	10	6	10	17	16	13	144	144	1	143	143	2	2	145
Whitley.....	10	6	18	10	7	10	8	16	10	16	143	143	.....	143	143	.....	.....	143
Grand Total.....	1,984	1,910	1,813	1,839	2,661	2,073	2,167	2,456	2,937	2,578	2,406	26,325	962	25,199	25,444	1,712	1,469	27,267
																	374	

TABLE D.
Marriages, Grouped Ages, for the Year Ending December 31, 1907.

COUNTIES.	Under 20.		20 to 30.		30 to 40.		40 to 50.		50 to 60.		60 to 70.		70 to 80.		80 and Over.		Not Reported.		Total.
	Grooms.	Brides.	Grooms.	Brides.	Grooms.	Brides.	Grooms.	Brides.	Grooms.	Brides.	Grooms.	Brides.	Grooms.	Brides.	Grooms.	Brides.	Grooms.	Brides.	
Adams.....	1	75	157	127	54	16	6	22	25	15	6	1	1	1	2	1	2	1	218
Allet.....	10	125	694	568	155	92	31	13	8	4	4	1	1	1	1	1	1	1	824
Bartholomew.....	10	64	181	149	33	15	10	13	8	4	4	1	1	1	1	1	1	1	249
Benton.....	2	25	67	54	21	14	5	12	3	1	1	1	1	1	1	1	1	1	98
Blackford.....	8	48	100	76	22	12	9	6	4	1	1	1	1	1	1	1	1	1	143
Boone.....	7	73	177	144	40	14	9	6	6	5	3	6	4	1	2	1	1	1	249
Brown.....	7	36	57	36	12	9	4	3	6	1	1	1	2	2	1	1	1	1	88
Carroll.....	4	38	129	108	18	7	5	3	4	2	5	5	2	2	1	4	4	4	167
Cass.....	5	70	238	200	64	45	17	10	13	9	7	2	2	2	1	1	1	1	347
Clark.....	15	355	761	535	184	110	44	27	23	7	6	1	1	1	1	2	2	1	1,036
Clay.....	7	89	242	200	54	27	14	8	5	4	6	2	1	1	1	1	1	1	330
Clinton.....	4	96	217	158	52	31	15	12	14	6	5	3	1	1	3	3	3	4	310
Crawford.....	62	50	37	39	15	18	11	13	6	13	5	2	1	1	1	1	1	1	140
Davess.....	8	63	165	136	40	20	11	11	2	2	4	2	1	1	1	1	1	1	230
Dearborn.....	44	145	157	145	47	39	22	7	5	2	2	2	1	1	1	1	1	1	234
Deatur.....	2	41	118	109	31	17	15	3	1	4	6	2	4	4	3	4	4	4	180
Detailb.....	5	74	161	118	34	15	11	7	5	2	4	2	1	1	3	6	3	6	224
Delaware.....	21	163	415	331	91	52	31	20	14	14	9	3	2	2	1	1	1	1	563
Dubois.....	9	89	306	271	77	49	20	9	12	11	6	1	1	1	1	1	1	1	432
Elkhart.....	1	22	73	54	20	13	6	2	2	1	1	1	1	1	1	1	1	1	104
Fayette.....	11	50	174	162	61	49	18	11	9	6	1	2	1	1	2	1	1	1	261
Floyd.....	13	68	151	123	34	12	8	10	5	1	3	2	2	2	6	6	6	6	216
Fountain.....	2	29	95	83	35	11	6	6	2	4	1	1	1	1	1	1	1	1	145
Franklin.....	2	29	95	83	35	11	6	6	2	4	1	1	1	1	1	1	1	1	145
Fulton.....	1	36	113	96	21	9	5	2	4	4	1	2	3	3	6	6	6	6	148

Gilman.....	3	58	167	140	31	10	12	9	5	3	3	1	5	2	6	3	23	3	221
Groat.....	19	172	375	303	106	41	27	26	11	16	23	6	11	2	1	6	2	685	
Greene.....	16	112	269	196	41	31	20	9	8	4	4	1	8	1	3	3	1	567	
Handlon.....	9	68	193	163	44	24	13	15	9	9	13	2	9	1	2	2	1	28	
Hancock.....	5	43	117	91	25	18	9	6	6	3	3	1	6	3	1	1	1	166	
Harrison.....	6	40	103	80	19	13	6	5	3	1	3	2	3	3	2	2	2	143	
Hendricks.....	4	48	122	66	20	11	2	2	3	1	1	2	3	2	2	2	2	199	
Henry.....	9	71	188	149	44	32	22	15	8	8	8	1	8	1	3	3	3	286	
Howard.....	5	80	215	131	66	42	24	20	11	8	9	2	11	2	2	2	1	340	
Huntington.....	5	60	160	137	35	12	7	5	7	2	3	1	7	4	6	4	1	218	
Jackson.....	57	155	125	125	34	27	17	7	6	2	4	2	6	1	1	1	5	222	
Jasper.....	3	27	75	56	9	7	3	3	4	2	3	1	4	1	1	1	1	96	
Jay.....	7	70	190	112	29	20	12	11	7	2	3	2	7	1	1	1	1	290	
Jefferson.....	12	75	163	128	39	24	10	8	8	2	6	3	8	2	2	2	2	264	
Jennings.....	2	40	107	86	30	17	5	3	8	2	1	2	3	2	2	2	2	190	
Johnson.....	5	39	124	101	27	20	8	7	8	4	4	2	8	2	2	2	1	175	
Knox.....	16	89	227	218	90	70	49	24	19	4	4	1	19	1	1	1	1	406	
Kosmicko.....	11	67	201	166	32	23	12	9	12	5	4	3	12	4	3	4	1	274	
Laguarda.....	8	52	102	73	20	15	6	2	6	3	4	2	6	2	2	2	1	148	
Laurance.....	1	313	625	546	327	233	169	75	46	3	4	2	46	2	2	2	2	1,172	
Laprite.....	80	298	237	237	84	33	22	14	11	4	5	3	11	1	3	1	1	421	
Lawrence.....	16	97	151	134	42	20	17	13	10	6	6	2	10	3	3	1	1	273	
Madison.....	32	230	453	362	112	63	31	33	33	14	15	4	33	5	5	5	1	701	
Marion.....	40	428	1,024	1,641	561	361	262	125	76	49	32	8	76	7	7	2	6	2,560	
Marshall.....	4	46	153	125	21	13	10	10	12	3	3	4	12	3	1	1	1	266	
Martin.....	3	40	88	62	15	11	6	2	2	1	2	3	2	1	1	1	1	116	
Maine.....	5	61	263	188	52	20	16	11	9	10	6	3	9	3	3	3	1	324	
Monroe.....	11	82	146	109	44	20	15	10	3	4	8	1	3	1	1	1	1	230	
Montgomery.....	7	72	191	161	42	35	25	9	8	9	5	3	8	2	2	2	16	235	
Morgan.....	12	77	154	123	43	18	11	12	6	6	6	1	6	1	1	1	1	238	
Morton.....	3	23	76	70	16	4	5	3	1	1	1	1	1	1	1	1	1	102	
Newton.....	3	23	76	70	16	4	5	3	1	1	1	1	1	1	1	1	1	102	
Noble.....	4	46	141	116	28	17	8	5	5	3	4	2	5	2	2	2	1	192	
Ohio.....	19	39	23	23	8	9	4	7	2	4	3	4	2	2	2	2	2	14	
Orange.....	7	50	110	90	26	14	11	8	4	4	3	1	4	2	2	2	2	185	
Owen.....	7	71	163	126	43	16	15	12	8	12	9	4	8	1	1	1	1	241	
Parke.....	6	66	138	112	36	12	13	9	7	1	1	1	7	1	1	1	2	201	
Perry.....	5	36	90	69	31	12	9	7	5	1	1	1	5	1	1	1	2	146	
Pike.....	7	69	136	105	37	18	12	6	7	8	24	1	7	1	1	1	1	201	
Porter.....	4	66	120	118	41	32	11	13	6	3	3	1	6	1	1	1	1	192	
Perry.....	4	66	120	118	41	32	11	13	6	3	3	1	6	1	1	1	1	213	
Pulaski.....	4	32	87	74	19	6	8	6	6	6	6	1	6	1	1	1	1	120	
Putnam.....	10	54	180	125	43	24	14	5	8	8	1	1	8	1	1	1	1	217	
Randolph.....	17	72	163	125	25	24	13	10	5	6	10	3	5	3	3	3	3	241	

TABLE D—Continued.

COUNTIES.	Under 20.		20 to 30.		30 to 40.		40 to 50.		50 to 60.		60 to 70.		70 to 80.		80 and Over.		Not Reported.		Total.
	Grooms.	Brides.	Grooms.	Brides.	Grooms.	Brides.	Grooms.	Brides.	Grooms.	Brides.	Grooms.	Brides.	Grooms.	Brides.	Grooms.	Brides.	Grooms.	Brides.	
Ripley.....	3	36	111	95	25	17	6	2	4	1	3	1	2	2	1	1	168	168	168
Rush.....	7	36	74	42	10	17	5	7	8	1	1	1	1	1	1	1	1	1	155
Scott.....	3	54	160	120	23	23	13	6	5	3	3	1	1	1	1	1	1	1	104
Shelby.....	2	64	154	141	40	12	9	6	6	6	5	1	1	1	1	1	1	1	207
Spearer.....	2	52	154	141	40	12	9	6	6	6	5	1	1	1	1	1	1	1	217
Stark.....	1	27	59	40	11	5	10	10	4	1	1	2	1	1	1	1	1	1	86
Steele.....	1	27	95	58	20	18	16	15	8	5	4	6	2	1	1	1	7	15	153
St. Joseph.....	14	171	623	547	137	97	59	36	30	11	12	6	2	1	1	1	7	15	884
Sullivan.....	2	159	289	161	26	27	7	8	5	4	1	1	1	1	1	1	1	1	320
Switzerland.....	1	17	51	45	11	7	4	4	3	1	3	1	1	1	1	1	1	1	74
Tippacance.....	7	80	279	225	63	47	21	17	9	8	13	7	6	1	1	1	1	3	398
Tipton.....	7	51	124	104	30	12	6	3	1	1	3	1	1	1	1	1	1	1	173
Union.....	13	13	42	35	8	7	5	5	1	1	1	1	1	1	1	1	1	1	65
Vanderburgh.....	13	149	672	636	237	145	70	35	25	16	12	1	3	1	1	1	4	6	1,037
Vermilion.....	3	61	128	86	33	21	3	3	7	4	3	2	2	1	1	1	1	1	177
Viro.....	48	289	643	535	213	147	92	64	42	18	16	7	5	2	1	1	7	6	1,065
Wabash.....	3	63	152	145	36	22	14	6	4	4	4	5	2	1	1	1	1	1	245
Warren.....	4	24	57	34	4	3	11	6	4	2	3	3	1	1	1	1	1	1	80
Warrick.....	8	52	123	95	29	26	5	4	6	4	4	4	2	2	1	1	1	1	177
Washington.....	3	45	123	98	25	14	5	2	3	2	2	2	2	2	1	1	1	1	163
Wayne.....	11	62	215	199	77	53	24	17	8	10	8	3	2	2	1	1	1	2	348
Wells.....	23	81	154	125	33	10	10	7	5	3	2	2	1	1	1	1	1	1	228
White.....	7	39	90	78	28	12	7	3	7	5	4	2	1	1	1	1	2	1	145
Whitley.....	9	40	86	73	35	21	11	7	2	2	1	1	1	1	1	1	1	1	143
Grand total.....	745	6,806	18,344	15,407	4,860	2,913	1,695	1,063	800	452	426	172	137	37	11	1	260	326	27,287

TABLE No. 7.

Deaths by Occupations, Months and Ages for the Year Ending December 31, 1907.

OCCUPATIONS.	Sex.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Actors and actresses.....	Males..... Females.....	1	1	1			1		3				
Agents.....	Males.....	11	9	5	5	7	6	4	9	5	6	2	6
Architects.....	Males.....		2		1	1					1	1	1
Artists.....	Males..... Females.....					1	1				2		1
Auctioneers.....	Males.....					1					1		
Bakers and confectioners.....	Males..... Females.....	1	3	3		5	2	4	2		1	3	2
Bankers.....	Males.....	1	1	1	1		5	2	1				1
Barbers.....	Males.....	8	6	10	5	11	5	2	6	7	7	5	5
Bartenders.....	Males.....	5	9	8	11	4	7	6	8	9	13	9	3
Basketmakers.....	Males.....	2		1				1				1	
Blacksmiths.....	Males.....	9	12	11	17	6	11	7	8	11	10	17	9
Boarding-house keepers.....	Males..... Females.....	2	1	2	1			1	2		2	4	
Bookbinders.....	Males.....												
Bookkeepers.....	Males..... Females.....	6 1	5 1	6 1	6 1	6 1	7 2	4	3 1	4	7	5	2

TABLE No. 7—Continued.

OCCUPATIONS.	Sex.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Brewers and distillers.....	Males.....	3	3					1	1	1			
Brickmakers.....	Males.....		2	1					2	1	1	3	
Builders and contractors.....	Males.....	9	9	5	12	6	5	7	6	3	5	5	1
Butchers.....	Males.....	1	3	4	2	5	3	3	1	2	2	6	4
Cabinetmakers.....	Males.....	7	6	6	4	12	8	5	8	9	5	3	4
Carpenters.....	Males.....	36	38	40	26	35	27	20	40	30	42	21	22
Carriage and wagonmakers.....	Males.....	2	2	5	3	2	4	1	2	2	2	2	2
Cheesemakers.....	Ma's.....												
Chemists and druggists.....	Males.....	2	3	4	3	2	1	2	2	2	4	2	5
Cigar-makers.....	Males.....		2	6	6		1	4	1	3	1	3	3
Clergymen and clergymen.....	Males.....	9	6	9	3	9	4	3	6	2	9	6	7
	Females.....		1	1				2					
Clerks.....	Males.....	16	8	10	19	7	14	22	12	15	23	14	31
	Females.....	4	1	1	1	1	1	5	1	3	2	4	1
Collectors.....	Males.....	1						2					
Commercial travelers.....	Males.....	9	7	8	10	3	5	5	5	4	2	3	3
Cooks.....	Males.....	1		2	2		1			2	1	3	3
	Females.....		2			1	1	1		1		1	1
Coopers.....	Males.....	4	5	3	1	4	4	1	1	3	4	7	5
Dentists.....	Males.....	2	1		1	2	4	1			1		3
Dress-makers.....	Males.....							1					

Dressmakers.....	Females.....	6	2	3	.....	3	.....	1	.....	3	1	1	3	2
Editors, reporters, etc.....	Males.....	.....	2	4	3	1	.....	2	1	2	1	.....	1	3
Electricians.....	Males.....	1	2	4	1	3	.....	2	3	3	3	3	2	1
Elevator operators.....	Males.....	.....	1	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Engineers.....	Males.....	13	9	13	5	11	.....	9	6	8	5	9	7	8
Engravers.....	Males.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....
Factory hands.....	Males.....	2	6	3	2	4	.....	1	4	7	8	23	6	6
	Females.....	.....	.....	1	.....	1	.....	.....	3	1	.....	.....	.....	1
Farmers.....	Males.....	338	430	500	368	380	.....	340	332	340	318	303	342	361
	Females.....	15	4	8	4	10	.....	4	3	10	10	16	13	21
Fishermen.....	Males.....	.....	.....	1	.....	5	.....	3	2	2	5	1	2	1
Foremen and forewomen.....	Males.....	.....	3	1	1	.....	.....	3	2	1	1	.....	2	1
	Females.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Furriers.....	Males.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Gardeners.....	Males.....	2	4	5	2	2	.....	3	.....	6	4	2	1	3
Glassworkers.....	Males.....	6	2	4	6	5	.....	4	3	7	5	5	2	2
Hair dressers.....	Females.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
Harnessmakers and saddlers.....	Males.....	2	1	3	6	2	.....	1	2	3	1	2	2	3
Horsemen.....	Males.....	2	4	2	2	2	.....	.....	2	6	1	2	3	2
Hotelkeepers.....	Males.....	2	2	.....	.....	2	.....	1	1	2	.....	1	.....	5
	Females.....	2	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Housewives.....	Females.....	544	615	645	550	478	.....	467	426	513	431	475	441	480
Hunters and fishermen.....	Males.....	.....	.....	.....	.....	.....	.....	1	.....	.....	1	.....	1	.....
Inspectors.....	Males.....	.....	.....	.....	.....	2	.....	1	.....	4	2	1	3	1
Janitors.....	Males.....	1	2	.....	2	5	.....	.....	2	.....	1	2	3	1
Labourers.....	Males.....	163	144	156	163	164	.....	143	143	133	142	124	164	171
Laundry.....	Males.....	.....	1	1	1	.....	.....	1	1	.....	1	1	.....	1
	Females.....	.....	.....	.....	.....	3	.....	1	.....	2	1	1	.....	1

TABLE No. 7—Continued.

OCCUPATIONS.	Sex.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Lawyers.....	Males.....	8	5	1	10	3	5	7	7	6	6	1	6
Livemen.....	Males.....	2	1	2	.....	1	2	3	2	.....	1	3	4
Lumbermen.....	Males.....	.....	.....	3	4	1	3	1	2	4	1	2	2
Mechanists.....	Males.....	6	9	13	14	11	7	13	11	3	10	10	5
Mail Service.....	Males.....	4	8	3	2	4	5	2	3	4	3	2	.....
Managers and superintendents.....	Males.....	.....	.....	.....	.....	.....	.....	.....	1	2	2	2	4
.....	Females.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....	.....	.....
Manufacturers.....	Males.....	8	4	8	6	2	5	13	6	6	2	2	7
Masons.....	Males.....	9	10	6	13	11	4	5	9	8	7	3	4
Mechanics.....	Males.....	7	10	8	5	12	6	13	8	12	9	7	6
Merchants.....	Males.....	30	31	38	37	22	29	32	25	32	28	29	44
Messengers.....	Males.....	.....	.....	.....	.....	1	.....	2	.....	.....	.....	.....	.....
Millmen.....	Males.....	1	1	1	1	1	.....	.....	2	.....	.....	.....	.....
Millers.....	Males.....	2	4	6	5	3	2	1	2	1	2	1	6
Milliners.....	Females.....	.....	1	1	.....	.....	1	1	.....	2	.....	1	.....
Miners.....	Males.....	22	11	9	15	15	7	14	10	12	10	11	15
Moulders.....	Males.....	2	3	4	2	6	2	5	4	4	.....	4	6
Musicians.....	Males.....	3	.....	2	2	2	3	1	2	2	.....	1	2
.....	Females.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....
Nom.....	Females.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....

Nurses.....	Females.....	1	34				5	1	2	2	2	1	3	1
Oil well drillers.....	Males.....		1		2			1	3	5	4		2	1
Opticians.....	Males.....													1
Painters.....	Males.....	17	12	13	9	11	13	14	12	9	11	8	8	18
Peddlers.....	Males.....		2	4	4			3	2	4	2	2		
Photographers.....	Males.....	1	1	1	1	2	3			1	1			4
	Females.....									1				
Physicians.....	Males.....	10	16	8	8	11	7	8	13	8	8	9	9	8
	Females.....			1						1		1		
Plasterers.....	Males.....	2	3		4	4		2	7	3	4	1	1	4
Plumbers.....	Males.....	2	3	4	1	2	4	1	3		2	1	1	2
Police-men.....	Males.....	3	4	4	1	8	5	3	8	3	5	2	2	3
Potters.....	Males.....		1	3				1						1
Printers.....	Males.....	4	7	2	6	3		5	2	4	4	1	1	3
	Females.....	1												
Professors.....	Males.....			1		1	1				1			
	Females.....													
Public officials.....	Males.....	4	3	2		3	2	3	5	2	4	3		3
Railway employes.....	Males.....	31	14	12	10	16	14	10	21	20	19	13	21	
Sailors.....	Males.....	3	1	2	3	1	1	2	1	1	1	2	2	
School teachers.....	Males.....	6	5	2	3	3	2	4	3	1	4	1	1	2
	Females.....	3	6	9		6	4	6	5	3	6	4	7	
Seamstresses.....	Females.....	1	3	4	4	1	4	1	4	2	3	1	1	2
Servants.....	Males.....	1	1	2	5	4	7	5	5	3	3	7	7	2
	Females.....	32	47	34	33	25	18	21	19	32	39	35	33	
Shoemakers.....	Males.....	6	11	4	7	3	3	7	6	6	8	6	6	5
Stenographers.....	Males.....	1				1								
	Females.....	1		1	1	2		2	1			2		4
Stock dealers.....	Males.....	4		2	1		1	3	1	4		1	1	4

TABLE No. 7—Continued.

OCCUPATIONS.	Sex.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Stonemasons.....	Males.....	3	4	3	.....	1	2	5	4	2	2	3	1
Students.....	Males.....	10	6	6	4	4	8	5	8	1	3	1	7
	Females.....	7	2	7	2	7	1	2	10	6	7	9	6
Servitors.....	Male.....				1								
Tailors and tailresses.....	Males.....	3	5	2	7	6	4	4	5	6	1	4	3
	Females.....			1	1			1	1				
Tanners and curriers.....	Males.....		1					2	1	1		1	
Tanners.....	Males.....	9	8	8	9	9	11	6	6	9	8	10	10
Telegraphers.....	Males.....	2		4	2	1	1	1	1	3	2	2	1
	Females.....											1	1
Telephone operators.....	Females.....	3					1		2	1	2	3	
Thimble.....	Males.....	2	1	3	6	3	2	2	4	2	3	1	1
Uncertain.....	Males.....			2	1		2			3	3	1	2
Upshoers.....	Males.....			1			1	1		1	1	2	
Veterinary surgeons.....	Males.....	1	1					1		2			1
Volunteers, soldiers and postmen.....	Males.....	2	6	5	3	5	6	1	2	2	3	4	5
Watchmakers and jewelers.....	Males.....	2		4	1	1		2	1	3	2	3	4
Wearers.....	Males.....	2	1	1	1	1	1	1	1		1	1	
	Females.....												

No occupation	183	198	221	180	189	183	174	191	159	167	167	176
Males	389	498	514	389	390	315	374	368	322	321	306	366
Females												
Totals	1,080	1,189	1,278	1,067	1,094	1,003	1,007	1,053	976	993	1,002	1,076
Males	1,013	1,187	1,233	990	901	826	852	944	832	875	853	938
Females												
Total, 15 years and over	2,099	2,376	2,511	2,077	1,905	1,828	1,859	1,997	1,808	1,868	1,855	2,014
Under 15 years												
Stillbirths												
Ages not given												
Grand total												

TABLE No. 7—Continued.

Deaths by Occupations, Months and Ages for the Year Ending December 31, 1907.

OCCUPATIONS.	Sex.	15 to 20		20 to 25		25 to 30		30 to 35		35 to 40		40 to 45		45 to 50		50 to 55		55 to 60		60 to 65		65 to 70		70 to 75		75 to 80		80 to 90		90 and over.		Un- known	Totals.		
		Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.				
Actors and actresses	Males.....									3	2	1										1												7	
	Females.....																																		
Agents	Males.....	1		2	2	2	2	2	2	5	7	6				6	6	7	5	11	8	7	4	1										74	
Architects.	Males.....									1						3	1						1	1										7	
Artists	Males.....	1		1																		1												3	
	Females.....											1	1																					2	
Auctioneers.	Males.....										1						1																	2	
Bakers and confectioners	Males.....	1		2	2	5	2	2								1	2			2	3		3	1									26	1	
	Females.....			1																															
Bankers.....	Males.....									2	1	2	1	1	1	1	1	1	1	1	1	1	1										13		
Barbers.....	Males.....	2		8	8	10	12	7	3	3	7	3	3	7	5	2	6	2						1	1									77	
Bartenders.	Males.....			3	8	11	15	13	14	11	7	3	3	3	3							2	2											92	
Basketmakers	Males.....					1									1							1												5	
Blacksmiths.	Males.....	1		6	5	2	3	5	4	8	9	16	8	9	16	14	17	24	13	1													128		
Boarding-house keepers.	Males.....					3				2	1	2	3	1							3	1												15	2
	Females.....																																		
Bookbinders	Males.....																																		
Bookkeepers	Males.....	3		9	7	5	6	5								3	6	4															61		
	Females.....			1			1																											8	

Brewers and distillers.	Males.	1	1	3	1	1	1	1	1	1	1	9					
Brickmakers.	Males.	1	1	1	2	1	1	1	1	1	1	10					
Builders and contractors.	Males.	1	4	4	5	8	6	5	6	13	10	73					
Butchers.	Males.	1	2	2	3	6	4	4	3	3	2	36					
Cabinetmakers.	Males.	1	5	4	1	4	4	5	9	2	9	4	6	12	11	77	
Carpenters.	Males.	4	10	8	10	13	19	21	37	36	38	37	62	37	41	4	377
Carriage and wagonmakers.	Males.	1						1	2	3	3	7	3	4	3	2	29
Cheesemakers.	Males.																
Chemists and druggists.	Males.	4	2	3	4			3	2	5	1	2	3	1	2		32
Cigarmakers.	Males.	2	4	5	4	1		4	2	1	1	3		1	1		29
Clergymen and clergymen	Males.	1	2	2	2	6	2	6	11	12	9	4	13	3			73
	Females.	1	2	2	2	6	2	1									4
Clerks.	Males.	21	26	22	12	14	13	10	12	10	8	5	1	2			181
	Females.	1	9	5	3	5	1	1									25
Collectors.	Males.		2								1						3
Commercial travelers.	Males.	3	2	2	8	5	8	7	9	6	5	6	2	1			64
Cooks.	Males.	1	1	1	2	1	5			2	2	1					15
	Females.			1	2	2	1		1								8
Coopers.	Males.						3	1	4	3	6	7	6	8	1		42
Dentists.	Males.		1	1	1	1	1	1	2	3	1						15
Draftsmen.	Males.																1
Dressmakers.	Females.	1															
Editors, reporters, etc.	Males.	2	4	1	1	3	1	2		4	1	1					20
Electricians.	Males.	2	14	1	1	3	2	2	2	1							28
Elevator operators.	Males.	1						1									2
Engineers.	Males.	4	2	6	10	13	10	14	10	10	3	10	6	4	1	103	
Engravers.	Males.		1														1

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TABLE No. 7—Continued.

OCCUPATIONS.	Sex.	15 to 20															Un- known	90 and over.	Totals.	
		15 to 20	20 to 25	25 to 30	30 to 35	35 to 40	40 to 45	45 to 50	50 to 55	55 to 60	60 to 65	65 to 70	70 to 75	75 to 80	80 to 90	90 and over.			Males.	Females.
Factory hands M	Males	6	8	11	5	7	5	7	5	1	3	3	1	5	2		2		71	8
	Females	2	3	3																
Farmers M	Males	106	151	115	111	121	116	100	216	288	389	550	607	694	712	87	10	4,363		
	Females		3	5	11	7	2	5	9	7	8	16	12	15	18					118
Firemen M	Males		4	2	3	4	2		4	1	1				1				22	
Foremen and forewomen M	Males		1																	
	Females		2				1		3	4	3								15	2
Furriers M	Males																			
Gardeners M	Males		1				2	1		1	6	4	6	8	5				34	
Glassworkers M	Males	7	5	4	6	4	5	3	4	3	3		4	2	1				51	
Handloomers M	Females									1										1
Harnessmakers and saddlers M	Males	1	1	2	2	2	1	1	1		1	5	3	3	3	2			28	
Horsemen M	Males		1	1	2	4	3		6	1	4	1		2	3				28	
Hotelkeepers M	Males					1	1	4		1	1	4	3		1				16	3
	Females								1			1								
Housewives M	Females	101	364	381	391	390	345	399	381	425	522	575	616	566	579	75	15			6,065
Hunters and fishermen M	Males		1					1									1		3	
Inspectors M	Males		1	2	1			2	1	1	4		1	1					14	
Joiners M	Males					2		1	1	5	4	2	3	1					19	
Labourers M	Males	106	166	150	129	146	132	148	140	121	125	138	114	70	73	13	9	1,780		
Laundry M	Males	1	1	1		1			1				1						4	12
	Females						2	1	3		3									

Lawyers.....	Males	1	4	1	2	2	2	8	5	14	11	8	2	5	65
Liverymen.....	Males			2	1	1	1	5	2	2	4	1	2		21
Lumbermen.....	Males				1			3	2	7	1	2	5		23
Machinists.....	Males	5	16	11	9	11	9	7	3	5	12	9	7	3	112
Mail service.....	Males	3	6	2			3	7	3	3	5	3		1	40
Managers and superintendents.....	Males				1	2	1			4	1		2		11
	Females											1			1
Manufacturers.....	Males	1	1	5	3	6	5	9	3	5	9	7	5	4	69
Masons.....	Males	1	2	2	3	3	3	10	8	5	8	13	11	6	89
Mechanics.....	Males	1	7	7	6	9	6	4	11	8	7	13	8	6	103
Merchants.....	Males	6	5	14	22	18	22	31	24	36	55	48	46	47	377
Messengers.....	Males	1			1							1			3
Milkmen.....	Males	1	1		1	1	1				1				6
Millers.....	Males	1	2	1	1	3	2	3	3	3	4	7	2	3	35
Milliners.....	Females	1	1					1				1	1		7
Miners.....	Males	13	19	9	19	16	7	11	12	10	6	9	6	2	151
Moulders.....	Males	3	1	7	6	3	4	6	4	2	3	1		2	42
Musicians.....	Males	2	5	3	2	3	2	1			1		1		20
	Females							1				1			2
Nuns.....	Females									1					1
Nurses.....	Females	2	2		2	1	3	3	1	2	3		1	1	21
Oil well drillers.....	Males	1	1	2	2	3	1	2	3	1	1	2			19
Opticians.....	Males				1										1
Painters.....	Males	2	11	12	9	11	10	10	19	13	15	17	13	2	147
Peddlers.....	Males	1			4	2	2	4	1	2	5	2			23
Photographers.....	Males	1	1	2	1		1	2	1	1	2	1	1	1	15
	Females							1							1

TABLE No. 7—Continued.

OCCUPATIONS.	Sex.															Un- known	90 and over.	75 80 90	70 to 75	65 to 70	60 65	55 to 60	50 55	45 50	40 45	35 40	30 35	25 30	20 25	15 20	Totals.	
		Males.	Females.																													
Physicians.....	Males.....	1	4	3	4		2	4	14	18	20	9	11	21	3	114	3															
	Females.....			1		1				1																						
Plasterers.....	Males.....	1		2	1		2	5		5	4	7	3	3	1	34																
Plumbers.....	Males.....	1	4	3	4	2	1	2	2	1	1	2	2			25																
Polkmen.....	Males.....		1	2	3	3	3	13	8	3	5	1	4	2	1	49																
Potters.....	Males.....	1	3		1										1	6																
Printers.....	Males.....	2	7	2	4	5	2	3	1	5	4	1	2	1		41	1															
	Females.....	1																														
Professors.....	Males.....			1					1	1			1			3	1															
	Females.....																															
Public officials.....	Males.....		1			2	1	6	4	5	5	4	4	2		34																
Railway employees.....	Males.....	9	33	18	17	23	18	21	11	14	10	12	4	9	1	201	2															
Sailors.....	Males.....	3	1					1	1		1	2	8	3		20																
School teachers.....	Males.....	3	7	2	2	3	3	2	1	1	3	2	3			27	59															
	Females.....	2	10	8	9	2	5	4	3	4	1	4	3	2	2																	
Seamstresses.....	Females.....	3	6	5	4	2	2	2	1		3		1	1			30															
Servants.....	Males.....	2	3	6	5	4	4	10	4	1	2	1				45																
	Females.....	41	48	42	23	24	20	15	21	25	23	28	21	17	4	371																
Shoemakers.....	Males.....	2	1	1	3			2	7	9	9	7	8	9	12	72																
Stenographers.....	Males.....	1	1	3	2	2										2																
	Females.....	1	6														14															
Stock dealers.....	Males.....			1	1	1	1	3	1	3	4	2	1	4		21																

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